Addendum No. 1
August 22, 2023

Rogers Orton Store Front Upgrades
Washington State University
Pullman, WA

Project No.1894-2023
Washington State University
Facilities Services, Capital

Addendum No. 1
August 22, 2023

Rogers Orton Store Front Upgrades
Washington State University
Pullman, WA

Bid Date: August 29, 2023

1. This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated July 21, 2023, and any prior addenda, as noted below.

2. Please acknowledge receipt of this addendum on the Form of Proposal.

This Addendum consists of one hundred forty-five total pages including the following Attachments:

Pre-Bid Meeting 8/19/23: Meeting Minutes
Pre-Bid Meeting 8/19/23: List of Attendees
Substitution Request: Kawneer 350 Medium or 500 Heavy Stile Door
Substitution Request: Kawneer 601T Center Set Storefront
SECTION 007200 General Conditions; Attachment A: Good Faith Hazardous Material Survey; Orton Hall

Changes to prior Addenda:
N/A

Changes to Bidding Requirements:

1-1. SECTION 00 11 13 – Advertisement for Bids

Item 1. Replace “Rogers Hall and Orton Hall are 12 story student dorms located on the Pullman Campus of Washington State University. WSU Student Housing wants to upgrade the main entry and lobby areas by removing and replacing the store front system at the main entry and removing and replacing the window system at the lobby area. Substantial Completion shall be achieved by June 1, 2024. Proposals MUST BE based on this Contract Time.”

Make read *“Rogers Hall and Orton Hall are 12 story student dorms located on the Pullman Campus of Washington State University. WSU Student Housing wants to upgrade the main entry and lobby areas by removing and replacing the store front system at the main entry and removing and replacing the window system at the lobby area. Substantial Completion shall be achieved by July 11, 2024. Proposals MUST BE based on this Contract Time.”*

Changes to Specifications:

SP 1-1. SECTION 00 72 00 – General Conditions

Item 1. Add: Section 00 72 00; Attachment A: Good Faith Hazardous Material Survey; Orton Hall

Approved Substitution Requests:

Drawing or Specification	Item	Acceptable Substitution Manufacturer or Product
08 44 13 Page 2 Paragraph 2.01.A	Marlin Windows Inc: System 45T Storefront-2”x6” Thermal Framing System	Kawneer 601T Center Set Storefront
08 44 13 Page 3 Paragraph 2.03.A	Curtain Wall/Door Framing System, Front Plane, 4 Sided Capture	Kawneer 350 Medium or 500 Heavy Stile Door

Changes to Drawings:
None

END OF ADDENDUM No. 1

PRE-BID MEETING

WSU Project: Rogers/Orton Hall Storefront Upgrades

Facility: Rogers and Orton Hall
Meeting Date: August 18, 2023 @10am

Project No: 1894-2023
Rogers Hall 1355 SE Olympia Ave
Orton Hall 1475 SE Olympia Ave

Recorded by: Kevin Poitra

Location: Onsite

1. Introductions:
   a. WSU Project Manager: Kevin Poitra
   b. WSU Construction Manager: Kevin Poitra
   c. WSU Customer: Auxiliary Facilities Services-Roxy Holden
   d. Design Team: Palouse Design Associates
   e. Attendance at the pre-bid meeting is encouraged.
   f. The Owner's meeting minutes will be routed to project plan holders as part of the first addendum.
   g. Send all questions regarding this project to the WSU Project Manager, with copy to the Architect: Palouse Design Associates
      i. All questions must be received no later than 7 days prior to Bid Date August 29th, 2023.
      ii. All requests for substitutions must be received by 7 days prior to Bid Date August 29th, 2023.
   h. Addenda will be forwarded to all plan holders. Addenda will be issued no later than August 22th, 2023.
   i. This is an active campus. There are students, faculty and visitors who either will not be aware of construction or will be distracted. Contractors must routinely work around the pedestrian population on campus as well as control noise and other construction related activities to minimize the effect on the campus. WSU is committed to a completely accessible campus. This means that when construction activities interfere with accessible pathways, that the General Contractor is responsible for putting in place temporary facilities (ramps, pathways, etc.,) to assure that all pathways are available. The WSU Pullman campus is a tobacco free campus.

2. Project Description: Rogers and Orton Hall - Remove and Replace the storefront door system at the main entrance, including installing metal clad infill panels at the lower section of the storefront. Reconnect the ada paddles as required. Remove and Replace the windows at the Lobby area, including installing metal clad infill panels at the lower section of the window system and installing drywall/paint at the lower section on the interior side of the window system. Electrical infrastructure work for connecting door hardware system components/Cougar Card and ADA components.

PRE-BID MEETING

Scope of work:

a. Expected work by Owner: Card reader-provided and installed by WSU Cougar Card Services.
b. Lay down area. Main Entrance/Lobby Area
c. Access & Haul Routes: Use Main entrance for access to the work area.
d. Occupied Area: Dining Administration occupies the North area on the first floor of Rogers Hall. Orton Hall not be occupied.
e. Existing Hazards: See Good Faith Survey.
f. Schedule Constraints: Construction start time is 7am-7pm.
g. Parking. Parking permits are required.
h. City of Pullman Building Permit. Permit is ready to be picked up. Permit costs are the responsibility of the Bidders. Bidders to include permit cost in their bids. The permit costs are-Rogers Hall-$2,403.89; Orton Hall-$2,403.89

3. Estimated Base Bid, not including taxes, is approximately: $335,000-$400,000

4. Expected Notice to Proceed date: To be determined

5. Estimated project duration after Notice to Proceed: Substantial Completion is July 11th, 2024

6. Bidders should review the complete version of the bid instructions in the Contract Documents and in any forthcoming addenda. Especially note the following:
   a. Bids shall be made upon the form of proposal in the Contract Documents.
   b. All information requested on the bid form shall be filled out completely and entirely to include:
      i. Base Bid amount
      ii. Alternate amount(s) as required
      iii. Unit Price amount(s) as required
      iv. Acknowledgement of each addendum received
   c. The bid shall include a bid security bond.
   d. Bid proposal format can be found in Section 00 42 13 Form of the Proposal. Bids can be emailed to Contracts@wsu.edu or a hardcopy may be delivered to McCluskey Services Building, 2425 East Grimes Way, Pullman WA 99164.
   e. The bidder is responsible for getting the bid prior to the bid date and time in the Contract Documents. The bid date is August 29th, 2023 at 2;30pm.
   f. Bids opening is August 29th, 2023 at 2:30pm
   g. Attendence in person is not allowed.
   h. Bidder Responsibility Mandatory Criteria: It is the intent of the Owner to award a contract to the low responsible bidder. Prior to awarding a contract, the apparent responsive low bidder must submit documentation demonstrating compliance as per

PRE-BID MEETING

Section 00 21 13, Part 1.17 – Low Responsible Bidder. Be prepared to submit the required documentation within 48 hours of receipt of request.

7. Summary of Construction Administration Requirements:

   a. For complete project administrative requirements refer to Division 1 and the Agreement between Owner and Contractor and addenda.
   b. Prior to starting work; the contractor will be required to submit a schedule of values and a construction progress schedule for review and approval.
   c. Regular progress meetings will be conducted during the course of the project and are on a as needed basis.
   d. Material information and/or shop drawings shall be submitted to the Owner for approval. The construction progress schedule shall include time for the submittal review and distribution process.
   e. O&M Manuals and Record drawings shall be submitted prior to Substantial Completion and the final application for payment and shall be identified as activities on the construction progress schedule.

8. A job-site visit may be scheduled during the course of the meeting.

9. Discussion/Remarks/Concerns:

   1. Contractor Question: Can we use the existing electrical infrastructure for the storefront system? *WSU Response-Yes: Contractor is responsible for determining if they can use the existing electrical pathway or if a new path way is needed.*

   2. Contractor Question: Can we put in allowance for filling in any holes we find in the soffits? *WSU Response – Yes,the bidders are responsible for all scope of work related to the removal and replacement of the storefront door system and the window system.*

   3. Contractor Question: If we are awarded the bid, can we do some selective exploration demo at the storefront jamb to see how the storefront system is connected to the wall during a Holiday break? *WSU Response – Our client, Housing Services said they can accommodate this during winter break beginning December 16, 2023. Exact dates to be scheduled through Construction Manager and Housing prior to December 16, 2023.*

   4. *Contractor is responsible for all the electrical work associated with the door hardware, and ADA component hardware.*

PRE-BID MEETING

5. Will there be an Abatement Contractor Removing the Cement and Pebble Crete Panels as Part of the Demo? and will someone be installing a Temp Interior/ Exterior Wall? *WSU Response - The bidders are responsible for all scope of work related to the removal and replacement of the storefront door system and the window system.*

End of Meeting

PO Box 641150, Pullman, WA 99164-1150
509-335-5571 • Fax: 509-335-9846 • facilitiesservices.wsu.edu

PRE-BID MEETING

ATTENDANCE RECORD

Project Title:	**Rogers/Orton Hall Storefront Upgrade**	No:	1894-2023
Meeting Location:	Rogers Hall and Orton Hall	Date:	August 18th, 2023

Name and Company	**Address**	**Phone**	**Email**
Kevin Poitra WSU - FS Capital	PO Box 641150 Pullman, WA 99164-1150	P: 509-335-4206	kpoitra@wsu.edu
Reese Kuiper Marlin Windows, Inc	5414 E Broadway Ave. Spokane Valley, WA 99212	(509) 535-3015	reese@marlinwindows.com
Ryan Kirkpatrick Skanska USA Building Inc.	221 Yale Avenue North Suite 400 Seattle WA 98109	(206) 496-4715	ryan.kirkpatrick@skanska.com
Ian Conley Skanska USA Building Inc	221 Yale Avenue North Suite 400 Seattle WA 98109	(206) 726-8000	Ian.conley@skanska.com
Gabe Huges Skanska USA Building Inc	221 Yale Avenue North Suite 400 Seattle WA 98109	(206) 379-6117	Gabriel.Hughes@skanska.com

SUBSTITUTION REQUEST

TO: Kevin Poitra, Project Manager, WSU

PROJECT: WSU - Rogers + Horton Hall Storefront Upgrades

SPECIFIED ITEM:

Section 08 44 13 **Page** 3 **Paragraph** 2.03.A

Description Curtain Wall/Door Framing System, Front Plane, 4 Sided Capture

PROPOSED SUBSTITUTION: Kawneer 350 Medium or 500 Heavy Stile Door

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identification of applicable data portions.

Attached data also includes description of changes to Contract Documents and proposed substitution requires for proper installation.

Undersigned certifies following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown on drawings.
2. Undersigned pays for changes to building design, including engineering design, detailing, and construction costs caused by proposed substitution.
3. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
4. Maintenance and service parts available locally or readily obtainable for proposed substitution.

Undersigned further certifies function, appearance, and quality of proposed substitution are equivalent or superior to specified item.

Undersigned agrees, if this page is reproduced, terms and conditions for substitutions found in Bidding Documents apply to this proposed substitution.

Submitted by:

Bud Henson bud@windowtechinc.com
Name (Printed or typed)

Bud Henson
Signature

Firm Name Window Tech Inc.

Address 6520 212th St SW., Ste 201

City, State, Zip Lynnwood, WA 98036

Date August 2, 2023

Tel: 360-600-0804 Fax:

General Contractor (if after award of Contract)

For use by A/E	
☒ Approved	☐ Approved as noted
☐ Not Approved	☐ Received too late
By Craig Beaumont	
Date 8/21/23	
Remarks	

Owner (if after award of Contract)

Date

2.03.A: Non thermal 350 matches specified Marlin door. (Kawneer recommends 350T/500T Insulpour Doors to meet WSEC of .60 U Value for swing entrance doors).

Features

- 190 narrow stile has 2-1/8" (54) vertical stile, 2-1/4" (57.2) top and 3-7/8" (98.4) bottom rail
- 350 medium stile has 3-1/2" (88.9) vertical stile, 3-1/2" (88.9) top and 6-1/2" (165.1) bottom rail
- 500 wide stile has 5" (127) vertical stile, 5" (127) top and 6-1/2" (165.1) bottom rail
- Door is 1-3/4" (44.5) deep
- Dual moment welded corner construction
- Single or double acting
- Infills range from 1/4" (6.4) to 1" (25.4)
- Offset pivots, butt hinges, continuous geared hinge or center pivots
- MS locks or panic hardware
- Surface mounted or concealed closers
- Architects Classic push/pulls
- Adjustable astragal utilizing pile weathering with polymeric fin at meeting stiles
- Polymeric bulb weatherstripping in door frames
- Permanodic® anodized finishes option
- Painted finishes in standard and custom choices

Optional Features

- Paneline® exit device or Paneline® MEL exit device
- Wide variety of bottom rail and cross rail

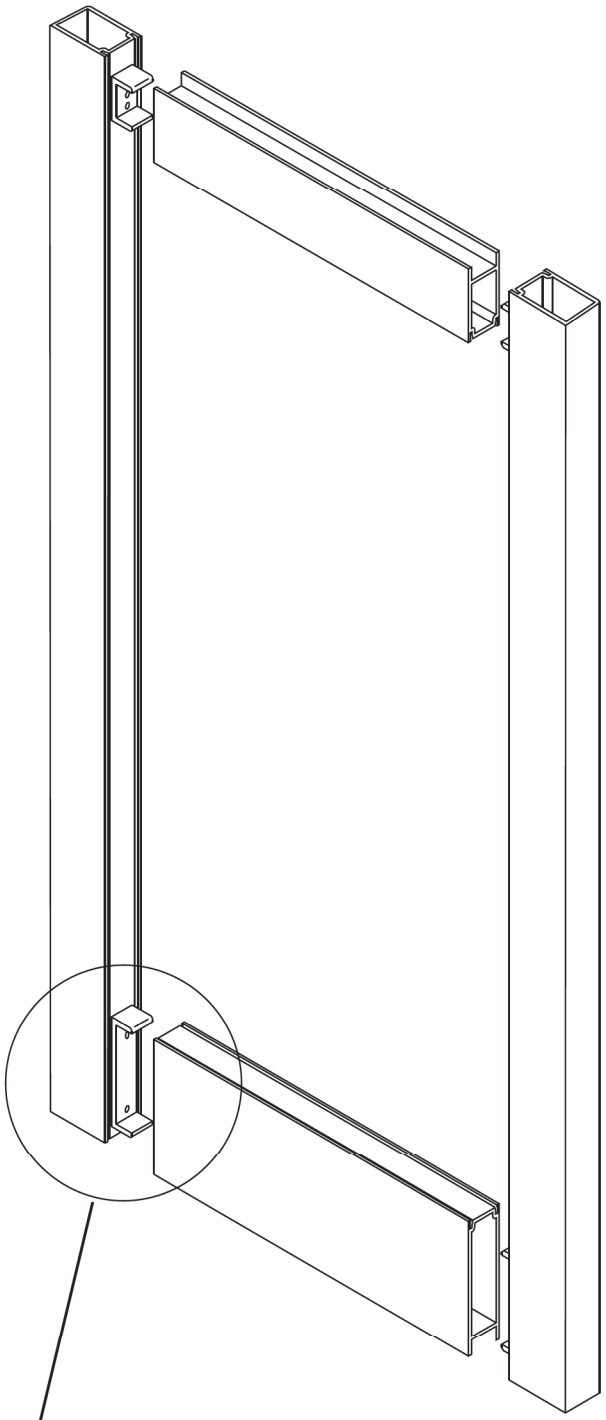
Product Applications

- 190 narrow stile - engineered for moderate traffic in applications such as offices and stores
- 350 medium stile - provides extra strength for schools, institutions and other high traffic applications
- 500 wide stile - creates a monumental visual statement for banks, libraries or buildings that experience heavy traffic conditions

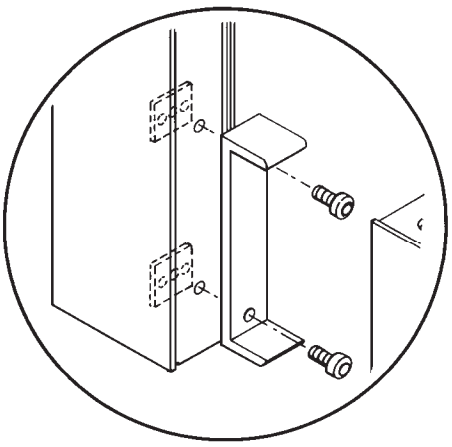
For specific product applications,
consult your Kawneer representative.

190/350/500 Standard Entrances

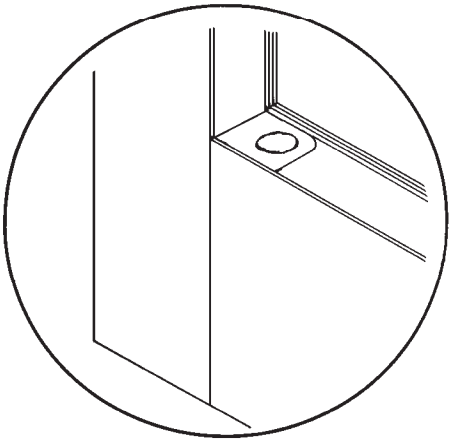
PICTORIAL VIEW



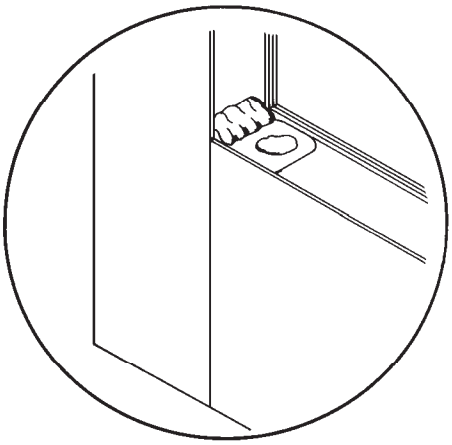
DUAL MOMENT WELDED CORNER CONSTRUCTION



#1 MECHANICAL FASTENING is accomplished by attaching a 5/16" (7.9) thick extruded aluminum channel clip to the vertical stile with 1/4"-20 heat strengthened bolts and 3/16" thick steel nut plates for a high strength welding base for attachment horizontal member.



#2 SIGMA* DEEP PENETRATION PLUG WELDS are made top and bottom after the horizontal is properly positioned over the channel clip to help provide the strongest door corner joint currently available.

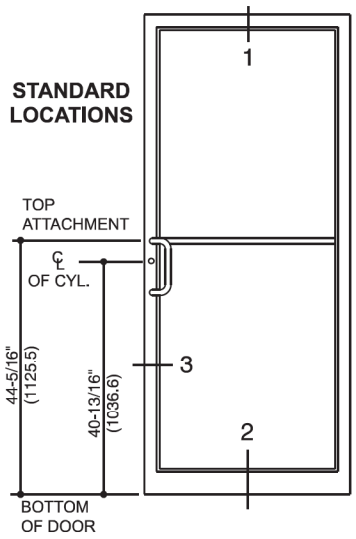


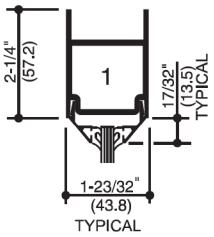
#3 SIGMA* FILLET WELDS along both top and bottom webs of the rail extrusion complete the welded corner construction.

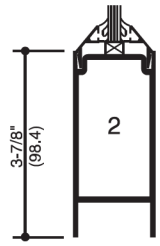
*** An arc welding process known as Shielded Inert Gas Metal Arc (SIGMA) or also known as Metal Inert Gas (MIG).**

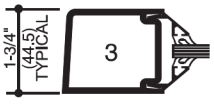
Additional information and CAD details are available at www.kawneer.com

190 NARROW STILE

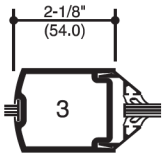






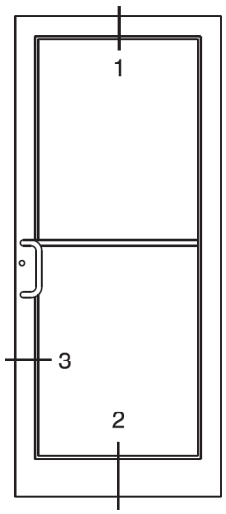


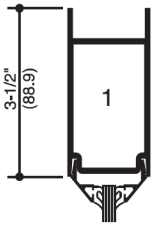
SINGLE ACTING

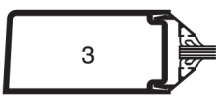


DOUBLE ACTING

350 MEDIUM STILE







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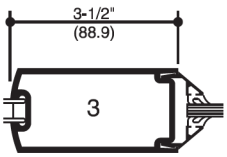
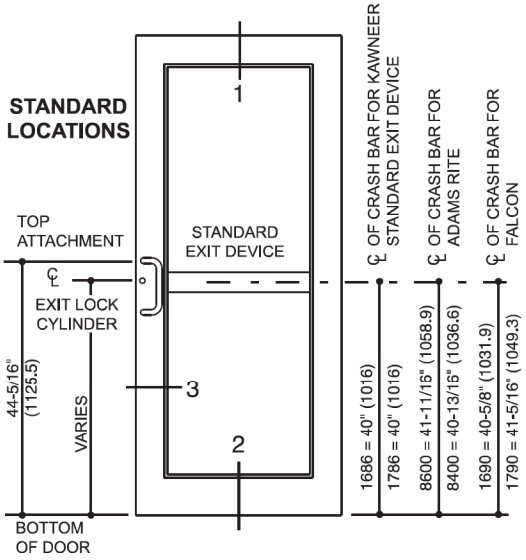
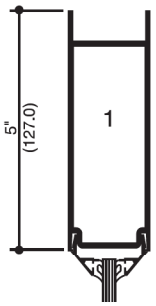
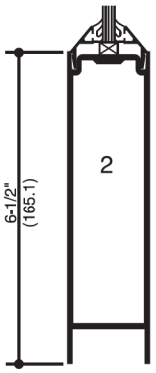


DOUBLE ACTING

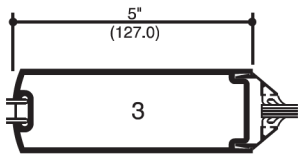
500 WIDE STILE







SINGLE ACTING



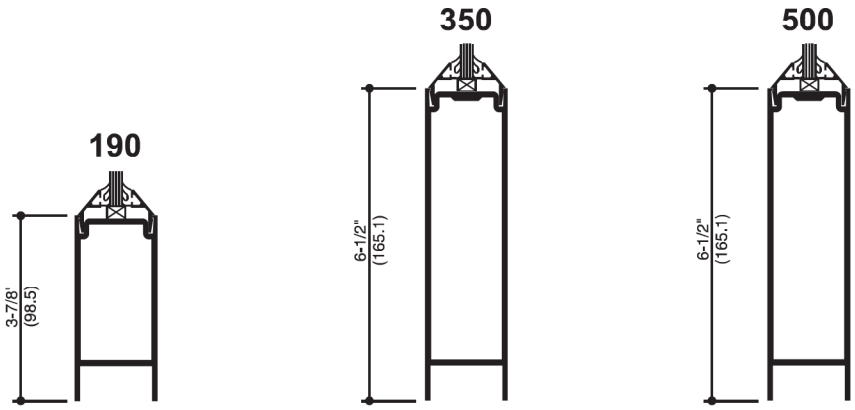
DOUBLE ACTING

Additional information and CAD details are available at www.kawneer.com

STANDARD BOTTOM RAILS

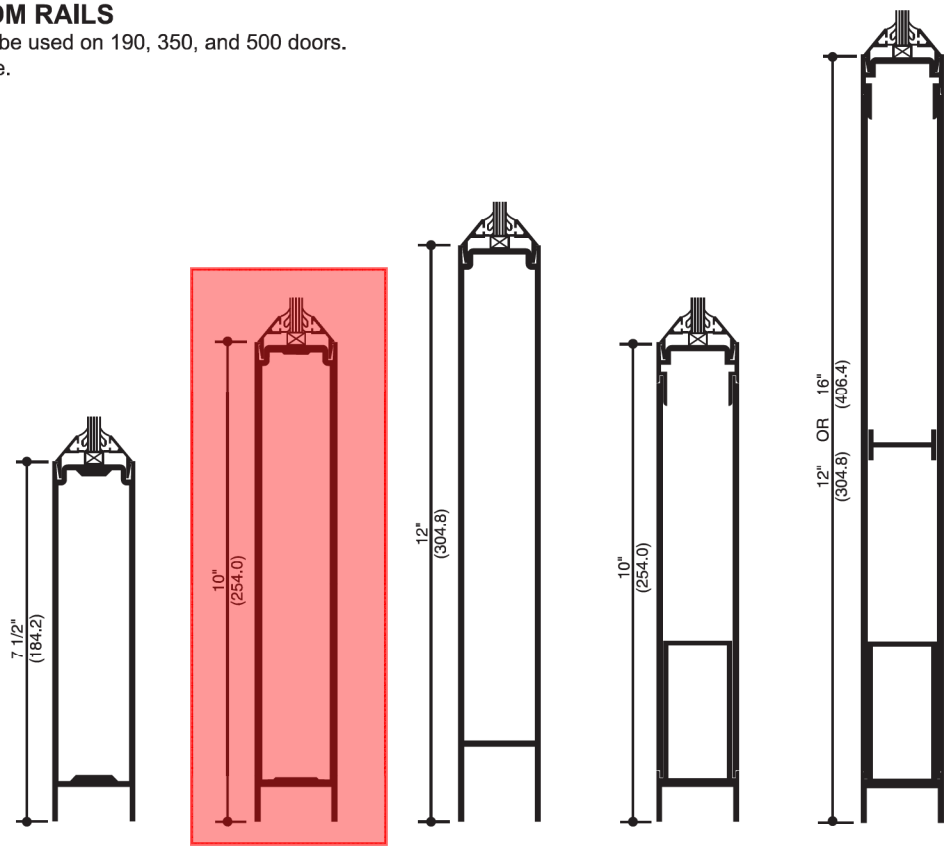
Rail heights shown may be used on 190, 350, and 500 doors.

NOTE:
See Page 19 for available Horizontal Intermediate Members.



OPTIONAL BOTTOM RAILS

Rail heights shown may be used on 190, 350, and 500 doors.
Custom heights available.



Note: Kawneer hardware specified in Section A103 of drawings.

190, 350 AND 500 STANDARD ENTRANCES

KAWNEER

Single-Source Packages Generate Versatile First Impressions

2.03.A: Non thermal 350 door matches specified Marlin door. (Kawneer recommends using 350T/500T Insulpour Door to meet WSEC required U Value of .60 for swing entrance doors).

Curtis Culwell Center
Garland, Texas
ARCHITECT
HKS, Inc., Dallas, Texas
GLAZING CONTRACTOR
B & B Glass, Inc., Dallas, Texas
PHOTOGRAPHER
© Blake Marvin – HKS

Tough yet attractive, Kawneer's Standard Entrances are designed as a single-source package of door, door frame and hardware that is easily adaptable to custom requirements. Designed to complement new or remodel construction as well as modern or traditional architecture, they are engineered, constructed and tested to make a good first impression while withstanding the rigors of constant use by occupants and visitors.

PERFORMANCE

To resist both lever arm and torsion forces that constantly act on any door, all three entrances feature welded corner construction with Sigma deep penetration and fillet welds plus mechanical fastenings at each corner – a total of 16 welds per door. Each door corner comes with a limited lifetime warranty, good for the life of the door under normal use. It is transferable from building owner to owner and is in addition to the standard two-year warranty covering material and workmanship of each Kawneer door.

1. Thermoplastic elastomer weatherstrip in blade stop of frame jambs, header or transom bar.
2. Integral polymeric fin attached to adjustable astragal, creating an air barrier between pairs of doors.
3. Optional surface-applied bottom weatherstrip with flexible blade gasket. Extruded raised lip on threshold to provide continuous contact for bottom weatherstrip.
4. Standard 1/4" beveled glass stops to sheet water and dirt off without leaving residue.
5. Available in all finishes offered by Kawneer.

ECONOMY

Kawneer's bulb neoprene weatherstripping forms a positive seal around the door frame and provides a substantial reduction in air infiltration, resulting in improved comfort and economies in heating and cooling costs. The system is wear- and temperature-resistant and replaces conventional weatherproofing. The bottom weatherstrip at the interior contains a flexible blade gasket to meet and contact the threshold, enhancing the air and water infiltration performance characteristics.

190 NARROW STILE ENTRANCE

- Is engineered for moderate traffic in applications such as stores, offices and apartment buildings
- Vertical stile measures 2-1/8", top rail 2-1/4" and bottom rail 3-7/8"
- Results in a slim look that meets virtually all construction requirements

350 MEDIUM STILE ENTRANCE

- Provides extra strength for applications such as schools, institutions and other high-traffic applications
- Vertical stiles and top rails measure 3-1/2"
- Bottom rail measures 6-1/2" for extra durability

500 WIDE STILE ENTRANCE

- Creates a monumental visual statement for applications such as banks, libraries and public buildings
- Vertical stiles and top rail measures 5"; bottom rail measures 6-1/2"
- Results in superior strength for buildings experiencing heavy traffic conditions

GENERAL

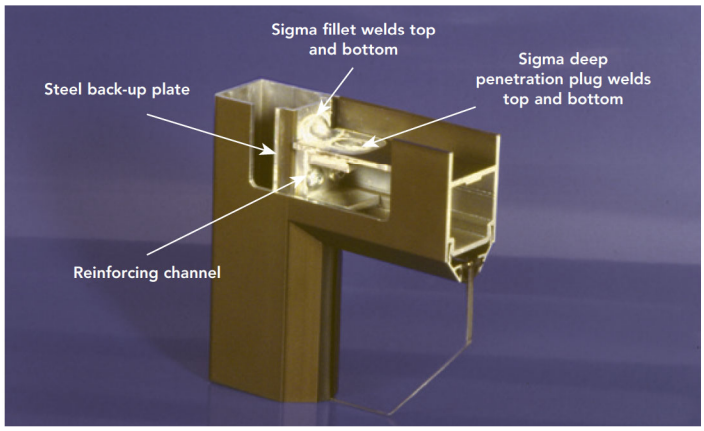
- Heights vary up to 10'; widths range from approximately 3' to 4'
- Door frame face widths range to a maximum of 4", while depths range to 6"
- Door operation is single- or double-acting with maximum security locks or touch bar panics standard
- Architect's classic 1" round, bent bar push/pull hardware is available in various finishes and sizes
- Infills range from 1/4" to 1"

FOR THE FINISHING TOUCH

Architectural Class I anodized aluminum finishes are available in clear and Permanodic® color choices.

Painted finishes, including fluoropolymer, that meet AAMA 2605 are offered in many standard choices and an unlimited number of specially designed colors.

Solvent-free powder coatings add the "green" element with high performance, durability and scratch resistance that meet the standards of AAMA 2604.



Kawneer Company, Inc.
Technology Park / Atlanta
555 Guthridge Court
Norcross, GA 30092
770.449.5555
kawneer.com

KAWNEER

ARCHITECTURAL SYSTEMS | ENTRANCES + FRAMING | CURTAIN WALLS | WINDOWS

** 250T/350T/500T Insulpour® Thermal Entrances

**Recommended door system to meet WSEC.

Features

- 250T narrow stile has 2-1/2" (63.5) vertical stile, 2-15/16" (74.6) top and 3-7/8" (98.4) bottom rail
- 350T medium stile has 3-1/2" (88.9) vertical stile, 3-1/2" (88.9) top and 6-1/2" (165.1) bottom rail
- 500T wide stile has 5" (127) vertical stile, 5" (127) top and 6-1/2" (165.1) bottom rail
- Door is 2-1/4" (57.2) deep
- Door has 1/8" (3.2) wall thickness
- Dual moment welded corner construction
- IsoPour® thermal break
- Single acting
- Infills include 1" (25.4) and 1-1/2" (38.1)
- Offset pivots, butt hinges, continuous geared hinge
- MS locks or exit device hardware
- Surface mounted or concealed closers
- Architects Classic push/pulls
- Adjustable astragal utilizing pile weathering with polymeric fin at meeting stiles
- Polymeric bulb weatherstripping and secondary weathering in door frames
- Permanodic® anodized finishes option
- Painted finishes in standard and custom choices

Optional Features

- Wide variety of bottom rail and cross rail
- Two color finish capability

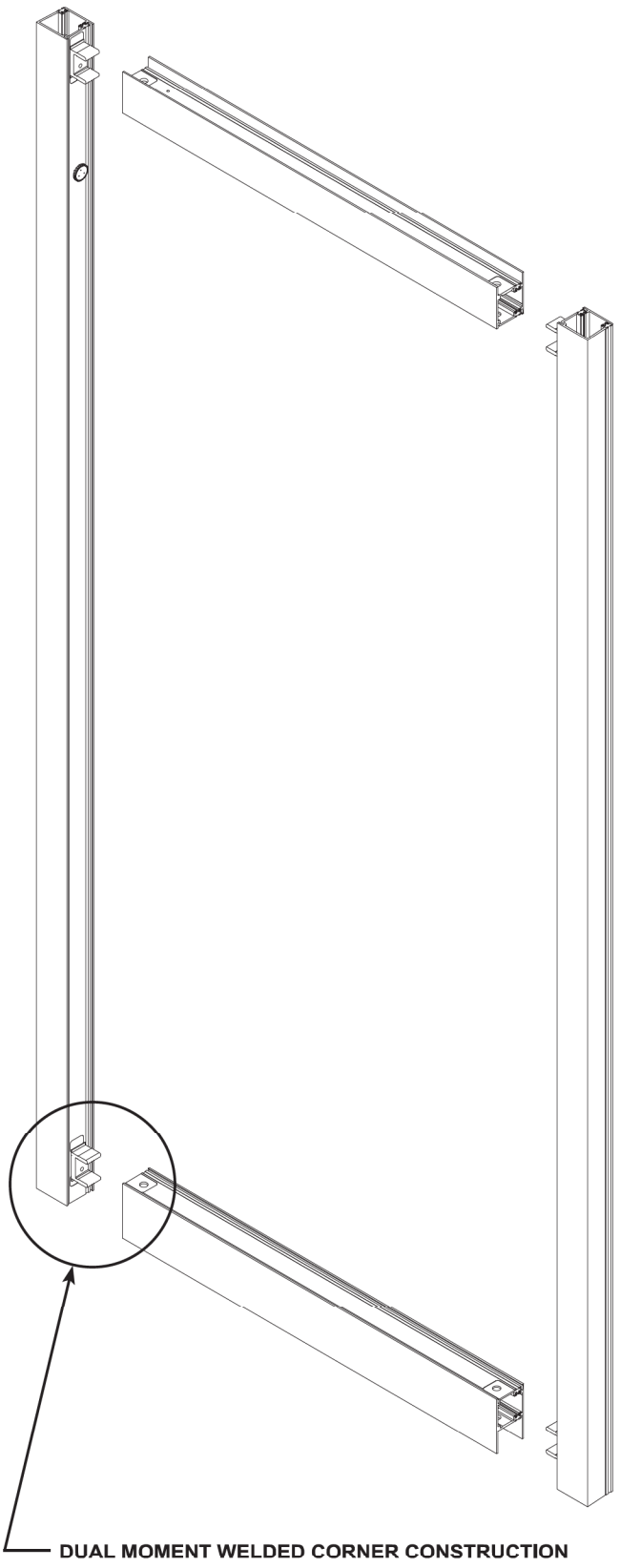
Product Applications

- 250T narrow stile - engineered for moderate traffic in applications such as offices and stores
- 350T medium stile - provides extra strength for schools, institutions and other high traffic applications
- 500T wide stile - creates a monumental visual statement for banks, libraries or buildings that experience heavy traffic conditions
- Engineered for high performance buildings

For specific product applications,
consult your Kawneer representative.

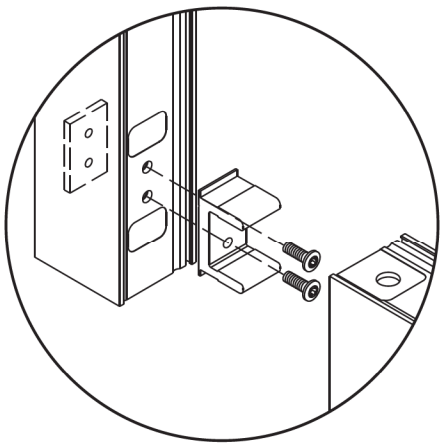
250T/350T/500T Insulpour® Thermal Entrances

PICTORIAL VIEW

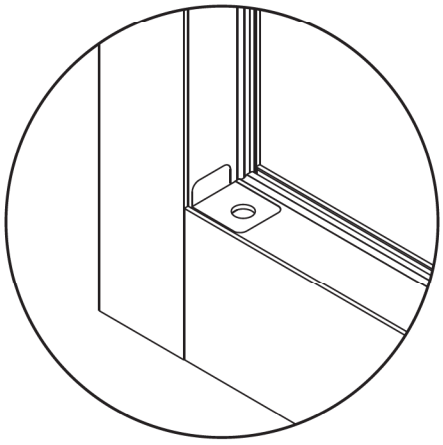


DUAL MOMENT WELDED CORNER CONSTRUCTION

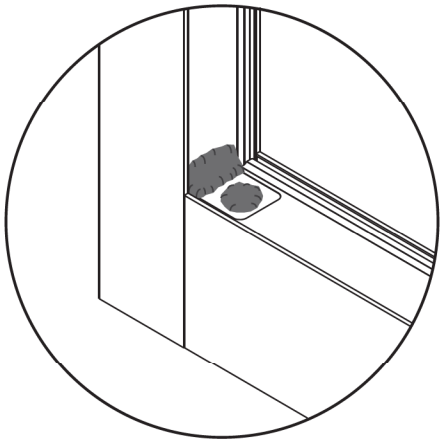
*** An arc welding process known as Shielded Inert Gas Metal Arc (SIGMA) or also known as Metal Inert Gas (MIG).**



#1 MECHANICAL FASTENING is accomplished by attaching a 5/16" (7.9) thick extruded aluminum channel clip to the vertical stile with 1/4"-20 heat strengthened bolts and 3/16" (4.8) thick steel nut plates for a high strength welding base for attachment horizontal member.



#2 SIGMA* DEEP PENETRATION PLUG WELDS are made top and bottom after the horizontal is properly positioned over the channel clip to help provide the strongest door corner joint currently available.



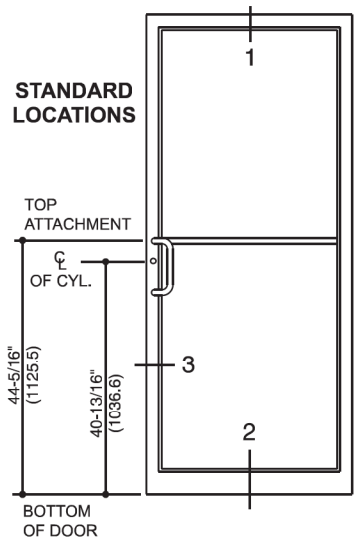
#3 SIGMA* FILLET WELDS along both top and bottom webs of the rail extrusion complete the welded corner construction.

250T/350T/500T Insulpour® Thermal Entrances

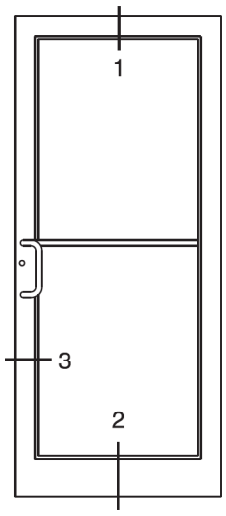
DOOR TYPES/SECTION DIMENSIONS

Additional information and CAD details are available at www.kawneer.com

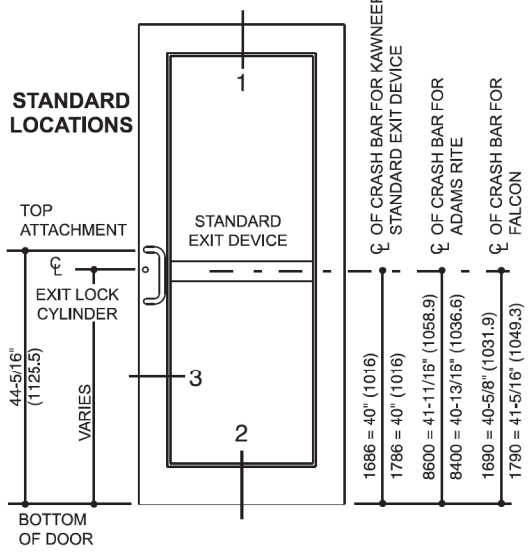
250T NARROW STILE

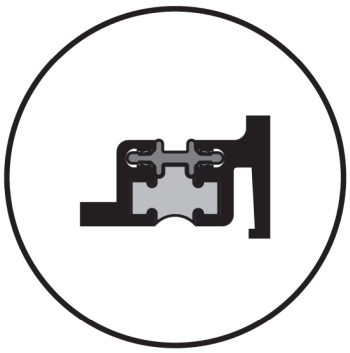


350T MEDIUM STILE

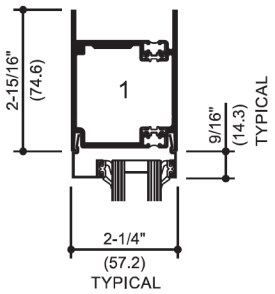


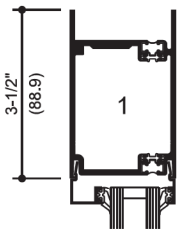
500T WIDE STILE

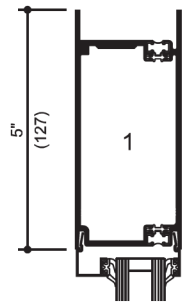


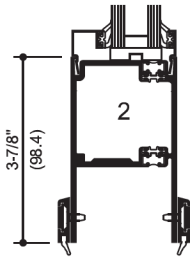


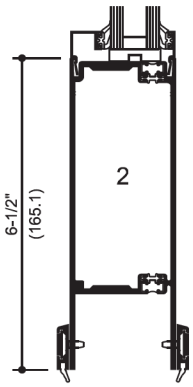
IsoPour® THERMAL BREAK

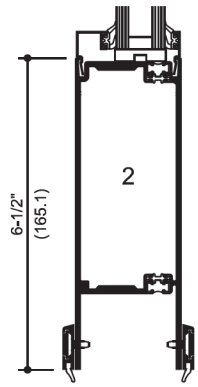


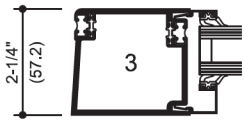




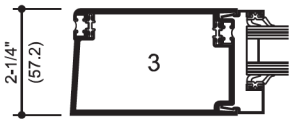








250T NARROW STILE SINGLE ACTING



350T MEDIUM STILE SINGLE ACTING

500T WIDE STILE SINGLE ACTING

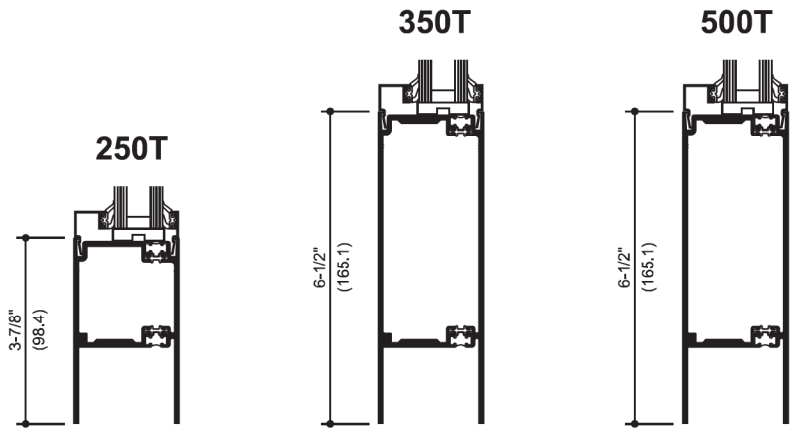
Note: 1-1/2" (38.1) Triple Insulating Glass Unit infill available.

Additional information and CAD details are available at www.kawneer.com

STANDARD BOTTOM RAILS

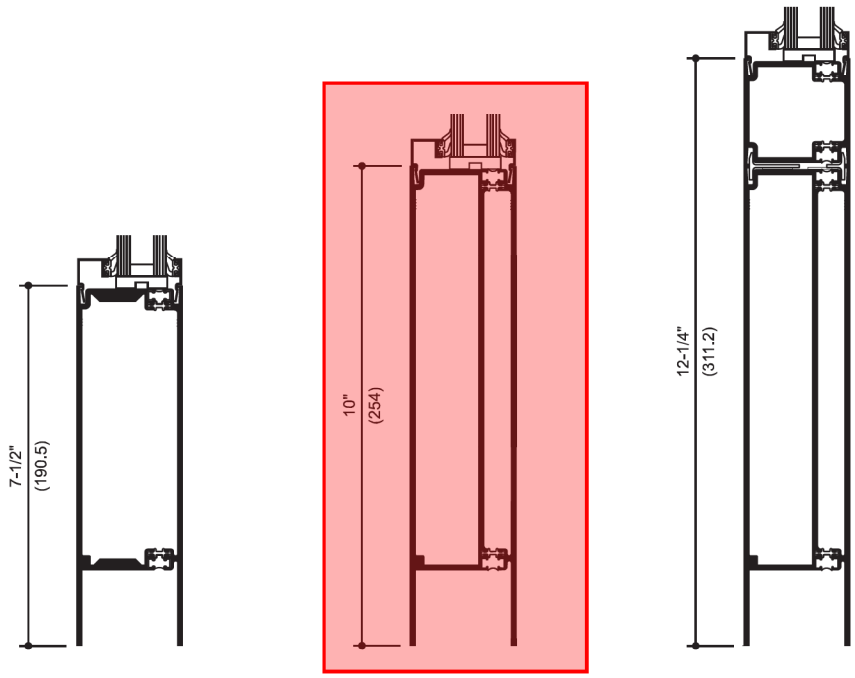
Rail heights shown may be used on 250T, 350T, and 500T doors.

NOTE:
See Page 18 for available Horizontal Intermediate Members.



OPTIONAL BOTTOM RAILS

Rail heights shown may be used on 250T, 350T, and 500T doors.
Custom heights available.



**250T/350T/500T INSULPOUR® THERMAL ENTRANCES

KAWNEER

Redefining Thermal Entrances with IsoPour™ Technology

**Recommended door system to meet WSEC - .60 U Value.

Ask more from your door, and get it all with Kawneer's new Insulpour® Thermal Entrances, featuring IsoPour™ technology. This innovative product offering gives architects, developers, owners, and glazing contractors the ability to create a true thermally broken entrance system. It's an ideal solution for high-end commercial and multifamily facilities looking to improve thermal control in common areas with moderate to high traffic.

By merging industry-proven pour and debridge and polymer isolator technologies, Kawneer's IsoPour™ Thermal Break technology creates thermally broken assemblies for enhanced building energy efficiencies with higher structural performance. Insulpour® Thermal Entrances simultaneously provide additional design flexibility through multiple door cross-rail and bottom rail choices along with dual finish capabilities for the door and door frame.

PERFORMANCE, STRENGTH & SECURITY

The door and frame both leverage IsoPour™ Thermal Break technology, enabling high thermal performance. Specifically aimed at quelling concerns about cold spots and thermal bridging from architects and specifiers, Insulpour® Thermal Entrances feature a true thermally broken door header, which significantly mitigates the formation of condensation when used with a concealed overhead closer. Insulating glass unit options of double pane 1" (25.4 mm) or triple pane 1-1/2" (38.1 mm) improve thermal and sound reduction performance.

For added strength, the 2-1/4" (57.2 mm) deep door has a stout 1/8" (3.2 mm) wall thickness, and the dual-welded corner construction of Insulpour® Thermal Entrances adds long-term performance. Each door corner comes with a limited lifetime warranty, good for the life of the door under normal use operation. It is transferable from building owner to owner and is provided in addition to the standard two-year warranty covering material and workmanship of each Kawneer door.

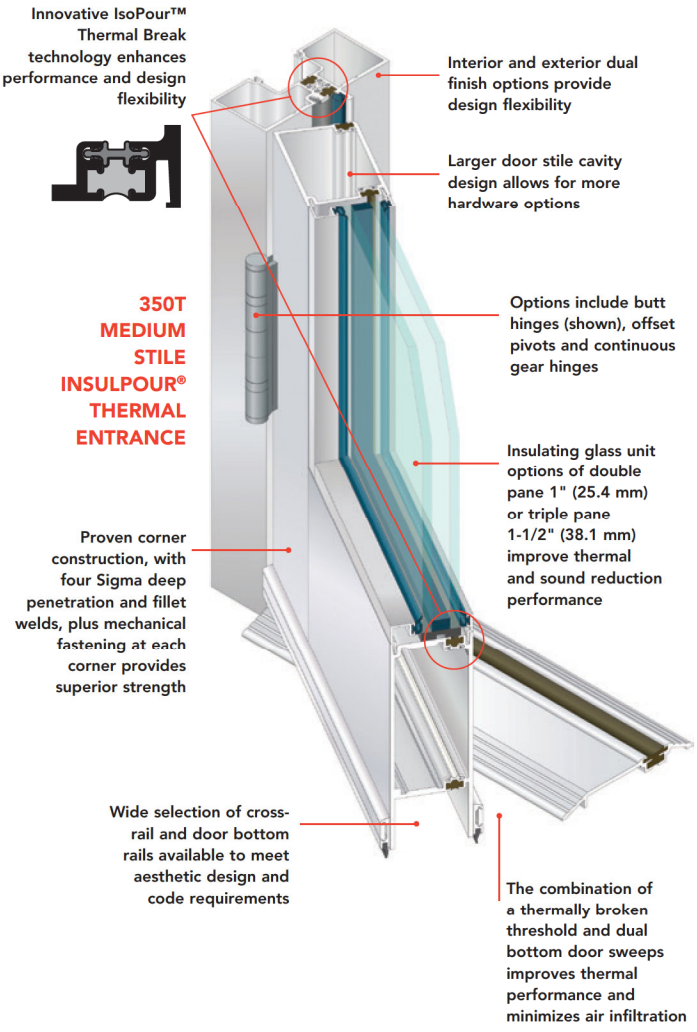
Insulpour® Thermal Entrances meet ASTM E1996 hurricane impact resistant requirements up to Zone 4 and Level D, and have undergone shock tube testing for blast mitigation. Contact your local Kawneer sales representative for limitations and specific application requirements.

AESTHETICS & DESIGN FLEXIBILITY

With sightlines that match standard, non-thermally broken entrances, Insulpour® Thermal Entrances offer 250T narrow, 350T medium and 500T wide stile options.

	VERTICAL STILE	TOP	BOTTOM RAIL
250T Narrow Stile	2-1/2" (63.5 mm)	2-15/16" (74.6 mm)	3-7/8" (98.4 mm)
350T Medium Stile	3-1/2" (88.9 mm)	3-1/2" (88.9 mm)	6-1/2" (165.1 mm)
500T Wide Stile	5" (127 mm)	5" (127 mm)	6-1/2" (165.1 mm)

The unique thermal break design allows for a wider choice of locking option hardware than previous thermal entrance designs. Coupled with various cross-rail sizes and multiple bottom rail heights of 7-1/2" (190.5 mm), 10" (254 mm) and 12" (304.8 mm), Insulpour® Thermal Entrances give architects, designers and building owners more opportunities to bring their vision to life.



Kawneer Company, Inc.
Technology Park / Atlanta
555 Guthridge Court
Norcross, GA 30092
770.449.5555
kawneer.com

KAWNEER

ARCHITECTURAL SYSTEMS | ENTRANCES + FRAMING | CURTAIN WALLS | WINDOWS

SUBSTITUTION REQUEST

TO: Kevin Poitra, Project Manager, WSU

PROJECT: WSU - Rogers and Orton Hall Storefront Upgrades

SPECIFIED ITEM:

Section 08 44 13 **Page** 2 **Paragraph** 2.01.A

Description Marlin Windows Inc: System 45T Storefront - 2" x 6" Thermal Framing System

PROPOSED SUBSTITUTION: Kawneer 601T Center Set Storefront

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identification of applicable data portions.

Attached data also includes description of changes to Contract Documents and proposed substitution requires for proper installation.

Undersigned certifies following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown on drawings.
2. Undersigned pays for changes to building design, including engineering design, detailing, and construction costs caused by proposed substitution.
3. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
4. Maintenance and service parts available locally or readily obtainable for proposed substitution.

Undersigned further certifies function, appearance, and quality of proposed substitution are equivalent or superior to specified item.

Undersigned agrees, if this page is reproduced, terms and conditions for substitutions found in Bidding Documents apply to this proposed substitution.

Submitted by:

Bud Henson bud@windowtechinc.com
Name (Printed or typed)

Bud Henson
Signature

Firm Name Window Tech Inc.

Address 6520 212th St. SW, Ste. 201

City, State, Zip Lynnwood, WA 98036

Date August 2, 2023

Tel: 360-600-0803 Fax:

General Contractor (if after award of Contract)

For use by A/E	
☒ Approved	☐ Approved as noted
☐ Not Approved	☐ Received too late
By Craig Beaumont	
Date 8/21/23	
Remarks	

Owner (if after award of Contract)

Date _____

The Construction Specifications Institute
Northwest Region

Advancement of Construction Technology

Features

- Trifab® 601/601T/601UT Framing System is 6" (152.4) deep with a 2" (50.8) sightline
- Center Plane glass applications
- Flush glazed from either the inside or outside
- Screw Spline fabrication
- Dual IsoLock® lanced and debridged thermal break
- Infill options up to 1-1/8" (28.6) thickness
- High performance sill flashing
- Permanodic® anodized finishes option
- Painted finishes in standard and custom choices

Optional Features

- Acoustical rating per AAMA 1801 and ASTM E 1425
- Project specific U-factors (See Thermal Charts)
- Integrates with Versoleil® SunShade Outrigger System and Horizontal Single Blade System
- Profit$Maker® Plus die sets

Product Applications

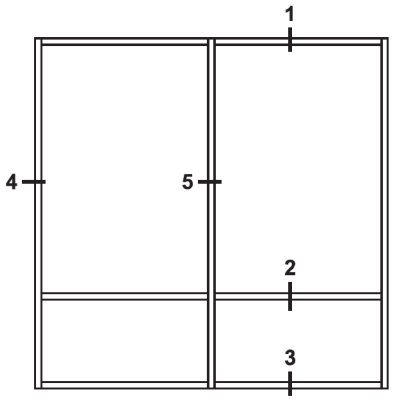
- Storefront, Ribbon Window or Punched Openings
- Single-span
- Integrated entrance framing allowing Kawneer standard entrances or other specialty entrances to be incorporated
- Kawneer windows, or GLASSvent® Windows for Storefront Framing, or GLASSvent® UT Windows are easily incorporated

For specific product applications,
consult your Kawneer representative.

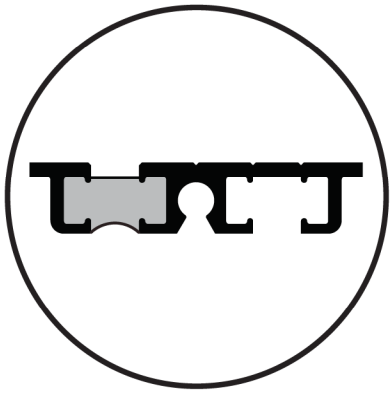
Trifab® 601/601T/601UT Framing System

BASIC FRAMING DETAILS (CENTER - Outside Glazed)

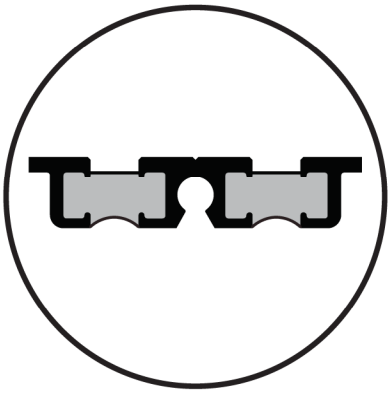
Additional information and CAD details are available at www.kawneer.com



ELEVATION IS NUMBER KEYED TO DETAILS

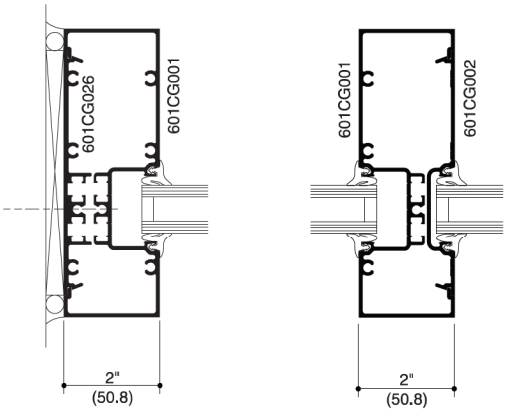


Trifab® 601T IsoLock® THERMAL BREAK



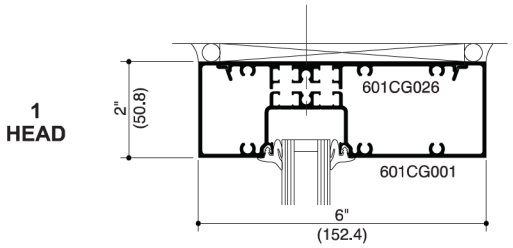
Trifab® 601UT DUAL IsoLock® THERMAL BREAK

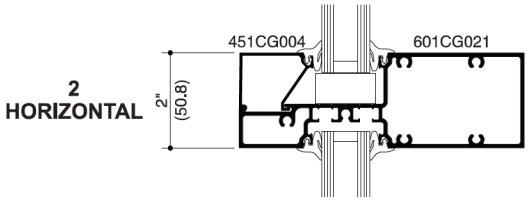
SCREW SPLINE

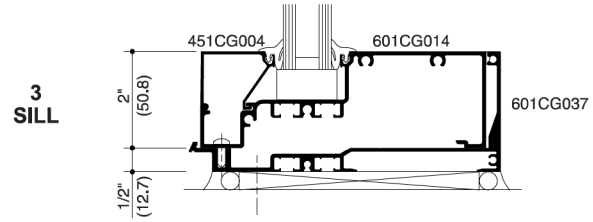


4 JAMB

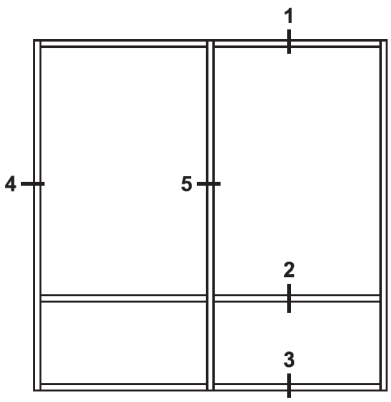
5 VERTICAL

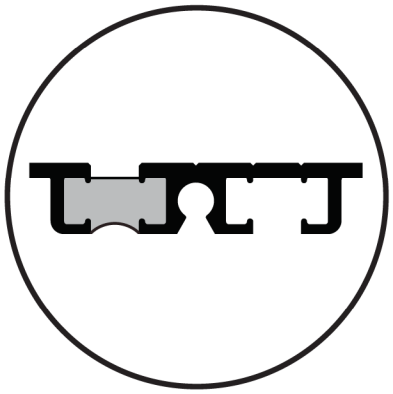


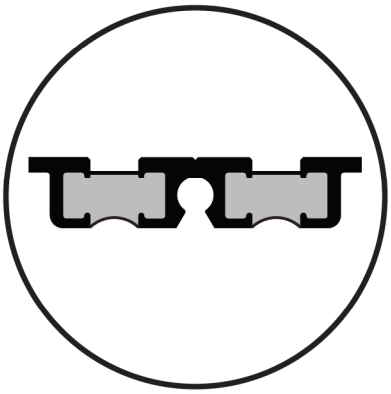


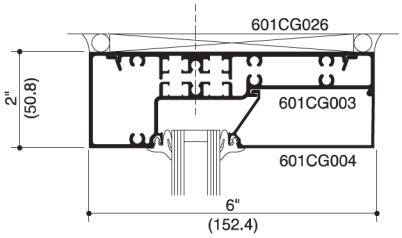


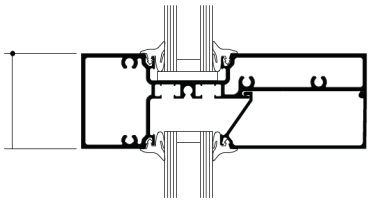
EC 97911-282

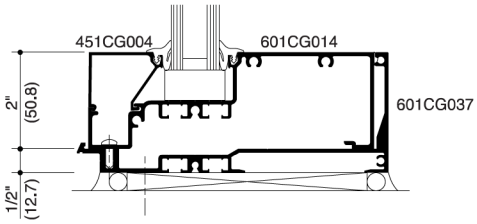












1.05: Matches specified warranty.

TRIFAB® VERSAGLAZE® 601/601T/601UT FRAMING SYSTEM

Versatility, Ultra-Thermal Performance and More Design Possibilities Front and Center

KAWNEER

2.01.A.1: Matches specified Marlin 45T Center Plane Storefront Framing System.

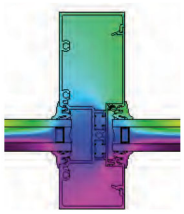
2.02.A: Will match specified Class II clear anodized finish. See attached color chart.

Kawneer's Trifab® VersaGlaze® 601/601T/601UT Framing System touts the first front set, ultra-thermal 6" storefront system available. By expanding on a proven platform, Trifab® VersaGlaze® 601 offers a choice of front and center plane glass applications in non-thermal, thermal and ultra-thermal configurations. Structural silicone glazing (SSG) options allow for an even greater range of design possibilities for specific project requirements and architectural styles.

PERFORMANCE

Flexible enough for a wide range of building projects, the Trifab® VersaGlaze® 601/601T/601UT Framing System has a 6" depth, which accommodates higher spans than conventional 4-1/2" storefront framing systems. The 3-in-1 series includes the non-thermal Trifab® 601, the single thermal break Trifab® 601T and the dual thermal break Trifab® 601UT. The greater system depth combined with three thermal performance options and two glass plane options make this one of the most versatile framing systems available. By combining the greater 6" depth with superior thermal performance and versatility, Kawneer is able to bridge the gap between traditional framing systems and low-rise curtain walls.

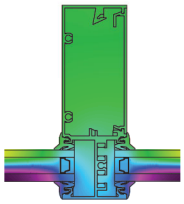
The Trifab® 601/601T/601UT Framing System is perfect for projects where an economical alternative to a low-rise curtain wall is desired. These systems meet the same high standards for air and water infiltration and thermal performance that are traditionally found in Kawneer products. The Trifab® 601/601T/601UT Framing System also has a high-performance sill design. The sill attaches to the sill flashing by way of a raceway and eliminates the troublesome blind seal method used on many flashing systems. The sill includes a screw-applied end dam, which ensures positive and tight joints between the sill flashing and end dam.



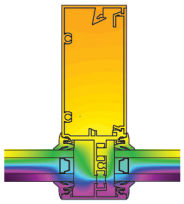
Trifab® 601 Center Set

Trifab® 601T Center Set

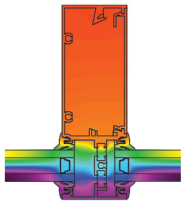
Trifab® 601UT Center Set



Trifab® 601 Front Set

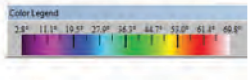


Trifab® 601T Front Set



Trifab® 601UT Front Set

Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.



PERFORMANCE TEST STANDARDS

Air Performance	ASTM E283
Water Performance	ASTM E331
Uniform Static Structural	ASTM E330
Sound Transmission Class (STC)	AAMA 1801 and in accordance with ASTM E1425
Condensation Resistance (CRF)	AAMA 1503 and CAN/CSA-A440
Thermal Transmittance (U-Value)	AAMA 1503.1
U-Value Simulations for Other Glazing Options	AAMA 507, NFRC 100, NFRS 200, NFRC 500 and CAN/CSA-A440.2

DIVERSE FABRICATION AND INSTALLATION METHODS

The Trifab® 601/601T/601UT Framing System employs various joinery construction types for efficient fabrication and installation.

Glass Plane	Center Set			Front Set		
Framing Type	601	601T	601UT	601	601T	601UT
Thermal Level	Non-Thermal	Thermal	Ultra-Thermal	Non-Thermal	Thermal	Ultra-Thermal
Screw Spline Fabrication	●	●	●	●	●	●
Shear Block Fabrication	—	—	—	●	●	●
Stick Fabrication	—	—	—	●	●	●
Stick Fabrication SSG	—	—	—	●	●	●

The framing can be specified for glazing from either the inside or outside. Inside glazing can help reduce field labor costs by eliminating the need for exterior scaffolding or swing stages for installation on floors above the ground level. In addition, the frames have a two-piece receptor option that easily accommodates attachment of air-barrier systems.

AESTHETICS AND VERSATILITY

Front Set System

Center Set System

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	#17	CLEAR	AA-M10C21A31	Architectural Class II (0.4 mils minimum)
	#40	DARK BRONZE	AA-M10C21A44	Architectural Class I (0.7 mils minimum)
	#29	BLACK	AA-M10C21A44	Architectural Class I (0.7 mils minimum)

Form No. 22-2354

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Norcross, GA 30092

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ATTACHMENT A

WASHINGTON STATE UNIVERSITY

Environmental Health and Safety

Good Faith Survey
Orton Hall (#0087)
Washington State University
Pullman, Washington

June 23, 2020

Prepared by:

Stephan Gilley
WSU Environmental Health and Safety
AHERA Building Inspector # BIR 20200430-08 (exp. April 30, 2021)

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FIGURES

APPENDICES

1 INTRODUCTION

Washington State University (WSU) Environmental Health and Safety (EH&S) conducted a "Good Faith" asbestos and limited lead in painted coatings survey of Orton Hall (Orton) in May 2020. Orton is located at 1475 Southeast Olympia Avenue at the west end of WSU's campus in Pullman, Washington. The facility was originally constructed in 1964 and serves as a men's and women's dormitory. This survey was conducted to meet Washington Administrative Code (WAC) 296-62-07721 Good Faith survey requirements for construction, renovation, demolition, and maintenance projects at Orton with the following limitations.

1.1 Limitations of the Assessment

The conclusions herein are professional opinions based solely upon visual site observations and interpretations of analytical data as described in this report. The survey excluded areas of the building which were inaccessible or would have caused damage to the building if sampled. Locations where inspectors would have been exposed to hazards were not evaluated (e.g., operating HVAC or building mechanical systems). Typical construction techniques can render building portions inaccessible. As a result, additional asbestos-containing materials (ACM) may be present in inaccessible areas (e.g., wall cavities, within energized systems). Suspect regulated materials within inaccessible areas should be presumed to contain asbestos until characterized. The following specific areas were excluded from this survey: Locked rooms 217T, 417T, 617T, 817T, 1017T, and 1402 (elevator machine room).

The opinions presented herein apply to the site conditions existing at the time of the investigation and interpretation of current regulations pertaining to asbestos and lead. Opinions and recommendations provided herein may not apply to future site conditions. Regulatory requirements in effect at the time of the work should be verified prior to any work impacting regulated materials. This report represents the findings of this survey only, and is not intended to establish scope or contractual terms supporting regulated material disturbance, abatement or disposal.

2 METHODOLOGY

This good faith survey was conducted by Stephan Gilley with WSU EH&S, AHERA Building Inspector #BIR20200430-08 (exp. April 30, 2021) in April 2020. The asbestos survey was performed referencing the "Good Faith" survey requirements outlined in WAC 296-62-07721.

To identify suspect ACM, EH&S walked through accessible locations in Orton, noting building materials and construction. Not all concealed areas or sub-surface suspect materials may have been surveyed (see Limiting Conditions in Section 1.1). Approximate suspect material quantities were estimated based upon field observations, measurements, and scaled building drawings provided by WSU Facilities Services. Quantities given are intended for order of magnitude information only and must be field verified to support project bidding or estimates.

2.1 Asbestos Bulk Sampling

Suspect ACM was grouped into homogeneous sampling areas (HSA) and categorized referencing 40 CFR 763, as thermal systems insulation (TSI), surfacing material, or miscellaneous material. The sampling plan included, at a minimum, the collection and analysis of samples as follows:

<u>Thermal System Insulation</u>

- In a distributive manner, a minimum of three samples of each HSA that was not presumed to contain asbestos.
- At least one bulk sample from each homogeneous area of patched TSI if the patch was less than 6 square feet.
- In a manner sufficient to determine whether the material is ACM, samples were collected from plaster/mudded pipe fitting insulation.

Surfacing Material

- In a distributive manner, a minimum of three samples collected from each homogeneous area that was 1,000 square feet or less.
- A minimum of five samples collected from each homogeneous area that was greater than 1,000 square feet but less than or equal to 5,000 square feet.
- A minimum of seven samples collected from each homogeneous area that was greater than 5,000 square feet.

Miscellaneous Material

In a distributive manner as deemed sufficient by the Inspector. At least one sample was collected of each suspect miscellaneous material not presumed to contain asbestos.

Non-Suspect Materials

Fiberglass, wood, metal, structural concrete or other generally recognized non-ACM were not sampled.

A set of suspect asbestos building material samples including plaster and ceramic tile were collected in January 2017 and ceiling texture was collected in November 2018 for a bathroom renovation project. These samples are included in the table summary of Appendix B and relied upon in this report.

Asbestos bulk samples and chain-of-custody forms were delivered to NVL Laboratories (NVL) in Seattle, Washington for analysis. In addition, two control samples were delivered to Environmental Hazard Services, LLC (EHS) in Richmond, Virginia. Each sample was analyzed by Polarized Light Microscopy (PLM) with dispersion staining referencing EPA Method 600/R-93/116. The detection limit for this type of analysis is approximately one percent (by visual estimate). Materials containing more than one percent asbestos are considered ACM.

2.2 Limited Lead Paint/Coatings Sampling

This lead survey was performed to assist employers' efforts to comply with the Washington Labor and Industries (LNI) lead standard for the construction industry (WAC 296-155-176) during renovation/demolition activities. Paint evaluation was limited to large homogeneous surfaces. Paint chip samples were collected from representative surfaces throughout the building and analyzed by flame atomic absorption spectrophotometry (FAAS) referencing EPA Method SW846 7000B. Paint chip results are reported by milligrams per kilogram of lead by weight. Any detection of lead in paint is reported as a lead-containing paint.

3 RESULTS

The following section details WSU EHS' asbestos sampling and lead in painted coatings sampling results. Asbestos and lead sample locations are identified on figures 1 through 15.

3.1 Visual Inspection

Orton is a thirteen-story rectangular shaped structure constructed in 1964 with mechanical rooms at the penthouse level, first floor, and basement levels. The first floor houses a reception desk, hall-director apartment suite, mail room, general storage rooms and laundry facilities. A central passenger elevator provides service from the first floor to the twelfth floor.

The second through eleventh floors are constructed near identically with 25 dormitory rooms and a centrally located bathroom, shower, a laundry room, custodial closet and study lounge near the elevator lobby of each floor. Stairwells are located the north, south and center sections of each floor.

A twelfth floor houses two lounges at the north and south ends as well as storage rooms, custodial closets, and a hall director suite. The thirteenth floor mechanical space contains air handling equipment and a heat exchanger tank associated with the steam heating system.

The building interior is mainly finished with: 9-inch and 12-inch vinyl tile, concrete, carpet flooring, plaster walls, textured ceiling paint/coatings and 12-inch ceiling tiles. Asbestos-containing vinyl floor was removed during renovation and abatement projects on floors 2 through 11. The building's exterior is finished with painted concrete, pebble-coated paneling, and exposed structural concrete columns.

3.2 Asbestos

Table 1 summarizes confirmed ACMs and assumed ACMs identified (**bold font**) during the survey.

Photographs referenced in the tables are provided in Appendix A. Quantities are estimated for order of magnitude information only and not intended for bidding purposes or fee estimates for construction or renovation projects.

Table 1 – ACMs and Assumed ACMs

Material	Location(s) of ACM	Photo #	Approximate Quantity
Class I – Thermal System Insulation			
Pipe insulation (mudded/plaster elbows and either magnesia block insulation or fiberglass straight pipe runs)	Steam and domestic water lines throughout building including tunnel access, radiator heating loops, and vertical plumbing pipe chases	1	2,500 LF 500 EA (fittings)
Tank insulation	Mechanical room 1302 - gray heat exchanger tank	2	50 SF
Class I – Surfacing Materials			
Ceiling texture – thin white paint coating on concrete deck (ridge-flat pattern)	119, 121N, 121S, 125, 127	3	2,500 SF
Ceiling texture - white lumpy pattern applied to gray plaster	2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226	4	40,000 SF
Ceiling texture - white thick fibrous applied to gray plaster	1st floor: 102, 102S, 102A, 102B, 107, 114 12th floor: 1215, 1217, 1219, 1219A	5	4,000 SF

Class II – Miscellaneous Materials			
9-inch gray-white vinyl floor tile and associated black mastic	102S hallway, 107 hallway, 111, 112D, 112E, 117A, 121N*, 123, Suite 1202, 1206*, 1207, 1209, 1211, 1215*, and 1222 *Indicates material is under carpet	6	3,750 SF
9-inch orange with brown and white streak vinyl floor tile and associated black mastic	119 and 1210	7	150 SF
Tan-yellow pebble pattern sheet vinyl shelving with **gray paper backing and yellow mastic**	Janitor rooms: 119 and 1210	8	150 SF
Tan-yellow linoleum with brown adhesive (newer) and **residual black mastic**	113	9	50 SF
Sink undercoat (all colors)	117, 209, 309, 409, 509, 609, 709, 809, 909, 1009, 1109, 1211	10	13 EA
Reflective heat shield paper in round lights (assumed)	12th floor corridors Note: All round light fixtures in Orton must be inspected to confirm presence of heat shield prior to disturbance	11	10 EA
Mirror mastic behind 2 ft. by 5.5 ft. mirrors (assumed)	Elevator lobbies and rooms: 200, 300, 400, 500, 600, 617T, 700, 718, 800, 817T, 900, 918, 1000, 1017T, 1100, 1118, 1200 and 1208 bathroom entrance	12	175 SF
White-gray cement asbestos board panels in wall sections and behind pebble-texture panels (assumed)	Lower wall panels at east and west facades	13	2.5 ft. by 4 ft. (36 EA) 2 ft. by 2 ft. (88 EA)
Yellow mastic under plastic wall panel (assumed)	102A (elevator lobby)	14	2 ft. by 5 ft. (1 EA)
Fire rated doors (assumed)	Metal entrance doors and stairwell doors labeled with fire rating	-	125 EA

Table 2 – Materials That Contain <1% Asbestos

Material	Location(s) of ACM	Photo #	Approximate Quantity
Brown brittle mastic associated with green, brown and tan cove base system on plaster	Main hallways, corridors, and central areas throughout building	15	3,000 SF

Note: **Bold** indicates material that contains asbestos within description

Appendix B details asbestos survey sample numbers, material descriptions, sample locations and laboratory analytical results. Specific observations concerning ACMs are discussed below.

Thermal System Insulation
Magnesia-block type ACM pipe insulation (4-inch to 12-inch diameter) is located on steam and domestic water system piping that originates in the WSU steam tunnel which enters the building in mechanical rooms B-1 and B-2 and into mechanical rooms 165 and 165A as shown on figures 1 and 3. The larger diameter steam pipes transition into the smaller diameter wall-radiator loops on each floor by vertical plumbing chases located in the central portion of each floor (first through twelfth floors).

Ceiling textures
Three styles of asbestos-containing ceiling texture were identified in Orton. A white thin painted texture applied to the concrete decking (ridge-flat pattern) was observed in rooms 119, 121N, 121S, 125, 127 on the first floor. The second ceiling texture consists of a white lumpy texture over a soft gray non-asbestos plaster layer. The texture is located in the student dormitory rooms on the 2nd through 11th floors and in a twelfth floor student lounge (room 1226). The third ceiling surfacing material consists of white thick fibrous texture over a soft gray non-asbestos plaster layer. The texture is located in rooms 102, 102S, 102A, 102B, 107, and 114 on the first floor and in rooms 1215, 1217, 1219, 1219A on the twelfth floor.

Floor Tile:
Asbestos-containing 9-inch floor tile was previously sampled on floors two through eleven for three renovation projects. The 9-inch ACM floor tile was abated in the student dormitory rooms and hallways. During the full building survey, carpeted rooms were checked for tile on floors 1, 10, 11, and 12. Storage rooms on the first and twelfth floors (rooms 121N, 1206, and 1215) have asbestos-containing floor tile and black mastic underneath carpet.

Roofing
AI Central collected five roofing samples in February 2010 and attached in Appendix E of this report. Three of the five samples contain asbestos black felt and asphaltic materials beneath the top layer. The ACM roof was reportedly abated and replaced with a new rubber EPDM membrane roof that was observed on all roofing fields during this survey.

3.3 Lead Paints and Coatings

Appendix C details lead paint/coatings sample numbers, descriptions, sample locations, and lead paint chip results collected during the survey. The samples from the white and tan plaster ceiling and walls (samples collected in 111 and 127) and the white concrete wall (sample collected at exterior east wall) contain a detectable quantity of lead. The tan and white coatings applied to plaster walls and ceilings throughout Orton and the exterior structural concrete walls are considered lead-containing paints.

4 CONCLUSIONS

A copy of this report must be provided to any entity bidding on work at Orton Hall. A copy of this report must also be on site during any demolition, renovation and/or construction activities.

4.1 Asbestos-containing Materials

Regulated ACMs are identified in Table 1. Construction, renovation and maintenance activities involving the disturbance or removal of ACM must be conducted in accordance with WAC 296-62-077. Asbestos abatement must be performed by a Washington State licensed asbestos abatement contractor.

Materials that contain <1% asbestos
Although not regulated under the asbestos rule as an asbestos project, disturbing materials with <1% asbestos require the use of basic asbestos work practices outlined in WAC 296-62-017712(2); asbestos awareness training for workers outlined in WAC 296-62-07722(5); and use of respiratory protection in the absence of a negative exposure assessment to comply with the permissible exposure limit (PEL). A competent person must also be assigned and trained under the requirements of WAC 296-62-07728.

Contractors should use caution during construction even after asbestos abatement activities, as concealed ACM that has not previously been evaluated for asbestos may be encountered. Inaccessible

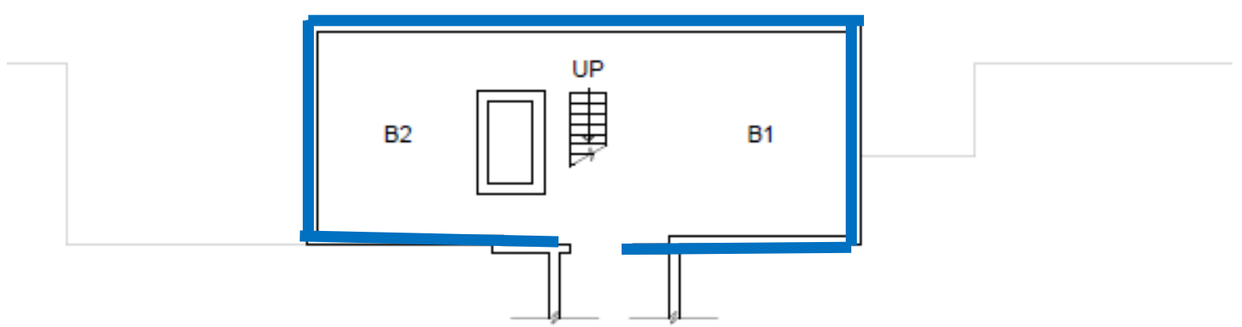
concealed spaces (e.g., wall and ceiling spaces enclosed by wallboard, internal components of energized systems etc. that have not been surveyed for ACM, and should be presumed to contain asbestos until destructive sampling is performed in those areas.

4.2 Lead-containing Paints/Coatings

Materials that have been shown to contain detectable levels of lead are regulated due to the potential for occupational exposure to lead if these materials are disturbed. Projects that may disturb lead require employers to evaluate worker/project personnel exposure to lead and prevent exposure above the permissible exposure limit (PEL).

FIGURES

Figure 1
Basement Floor – ACM Locations



N

Not to scale

ACM Key

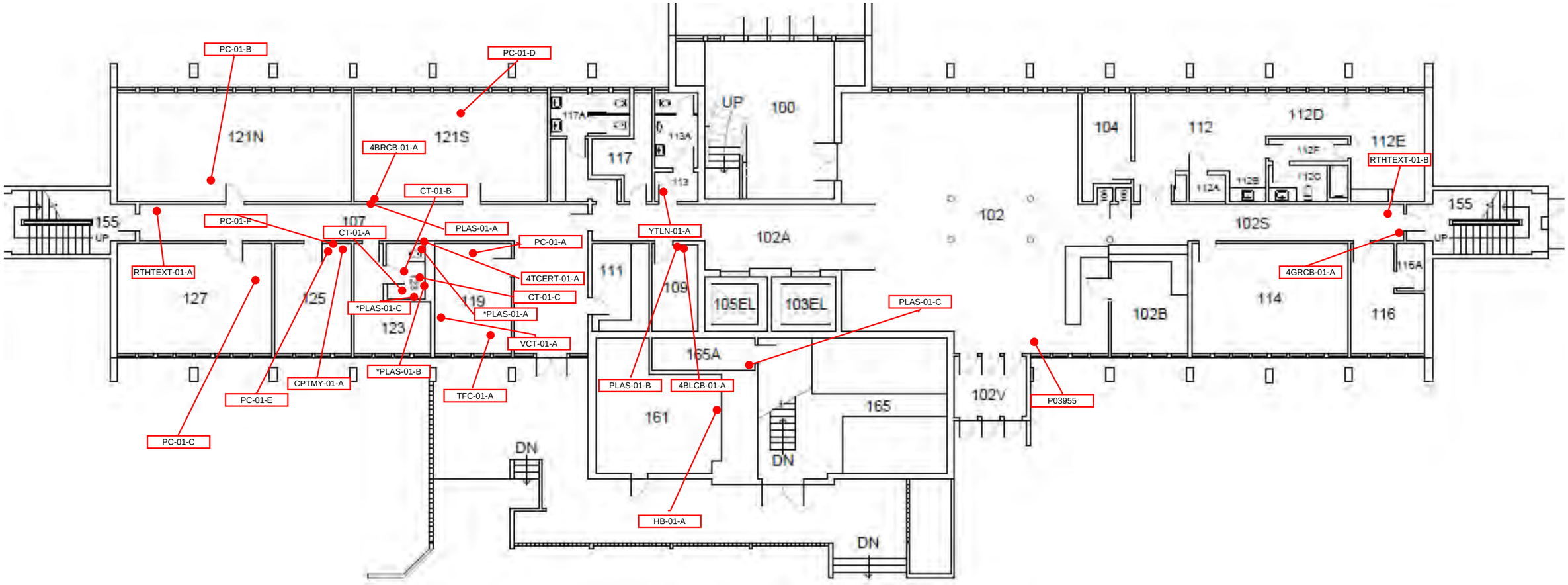
Pipe insulation (4-inch to 12-inch) and domestic water lines (hard mag-type with mudded fittings along walls).

Legend
P-## = Asbestos sample location (red)

Figure 1
Basement Floor
ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 2
First Floor – Sample Locations



Legend
P-## = Asbestos sample location (red)

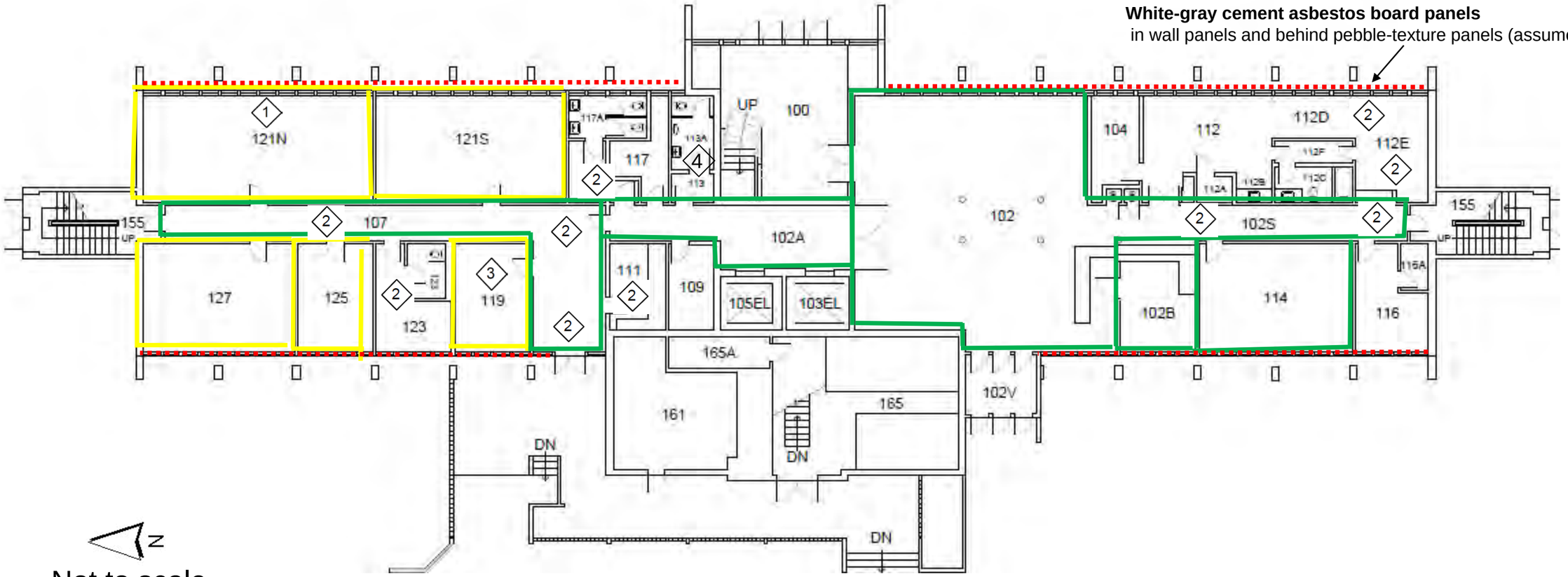
N

Not to scale

Figure 2
First Floor
Sample Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 3
First Floor – ACM Locations



Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases and in radiator heating loop.
2. Tan-yellow pebble pattern countertop with yellow adhesive and gray backing in room 119.
3. Sink undercoat in laundry rooms throughout building.
4. Metal entrance and stairwell doors labeled with fire rating (assumed).
5. Mirror mastic behind 2 ft. by 5.5 ft. mirror in lobby (assumed).
6. Yellow mastic under plastic wall panel in room 102A.

ACM Key

Ceiling texture: white thick fibrous over gray plaster in offices, lobby and corridors

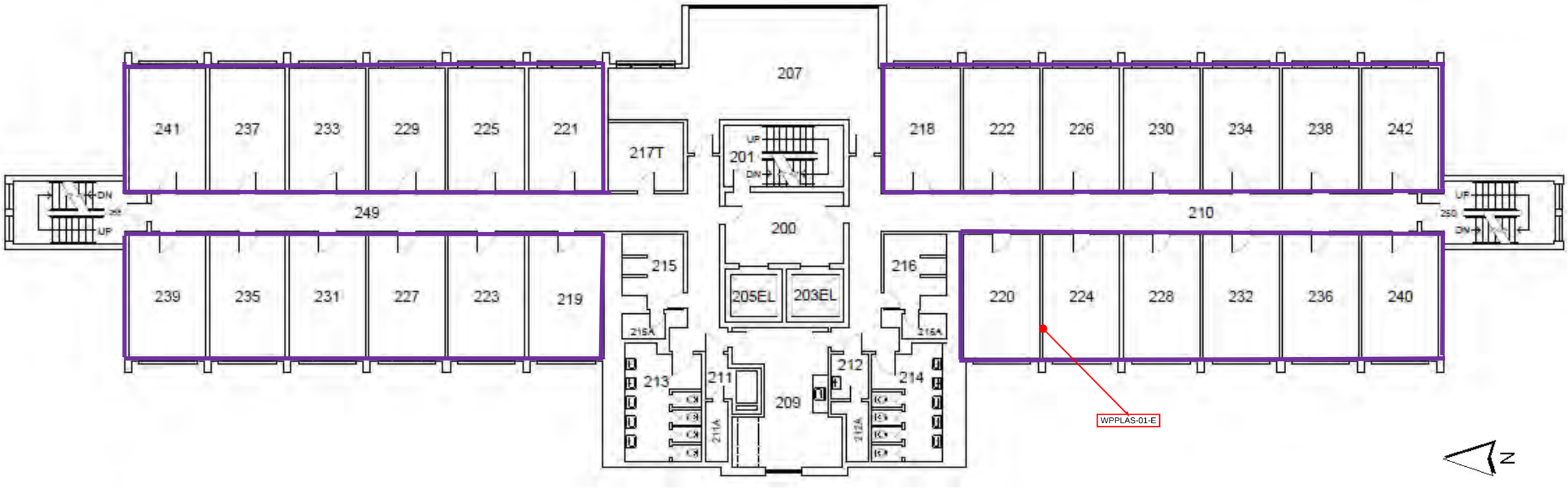
Ceiling texture: thin white paint coating on concrete decking (ridge-flat pattern)

1. **9-inch asbestos vinyl tile** <u>under</u> carpet
2. 9-inch white and gray streak vinyl tile and **associated black mastic**
3. **9-inch light orange with brown and white streak vinyl tile <u>and</u> associated black mastic**
4. Tan-yellow linoleum with brown adhesive**, paper backing, and black mastic**

Figure 3
First Floor
ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 4
Second Floor – Sample and ACM Locations



Not to scale

Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (211A, 212A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 200 and 217T (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 4
Second Floor
Sample and ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 5
Third Floor – Sample and ACM Locations

N

Not to scale

Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (311A, 312A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 300 (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

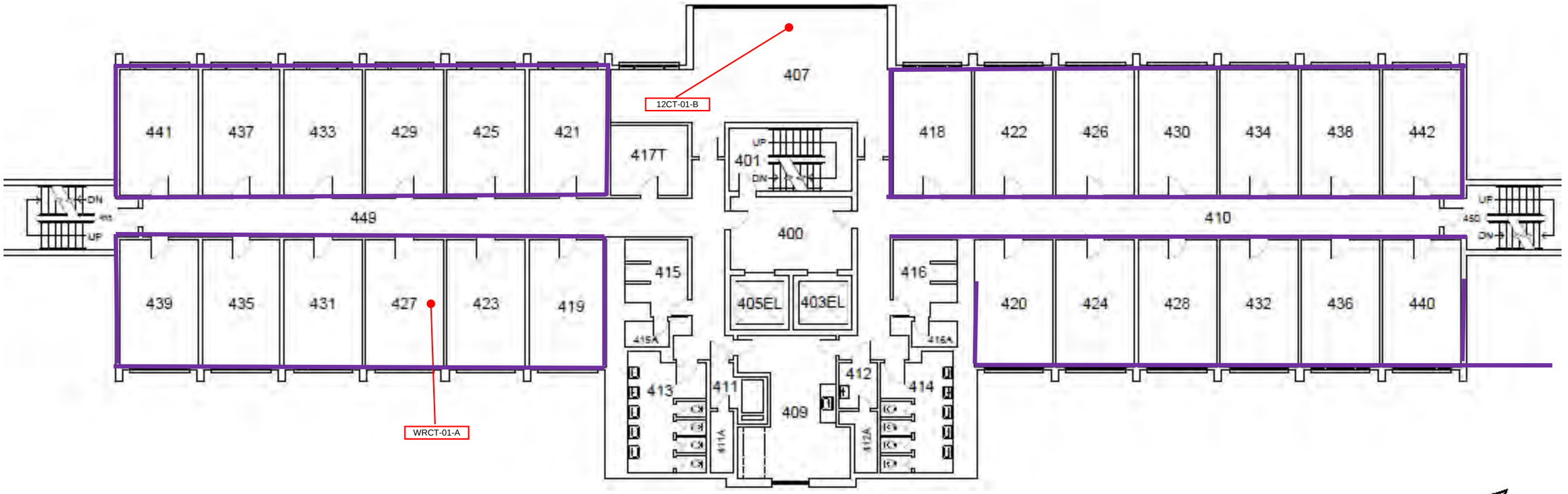
ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 5
Third Floor
Sample and ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 6
Fourth Floor – Sample and ACM Locations



N

Not to scale

Additional ACMs/Assumed ACMs:

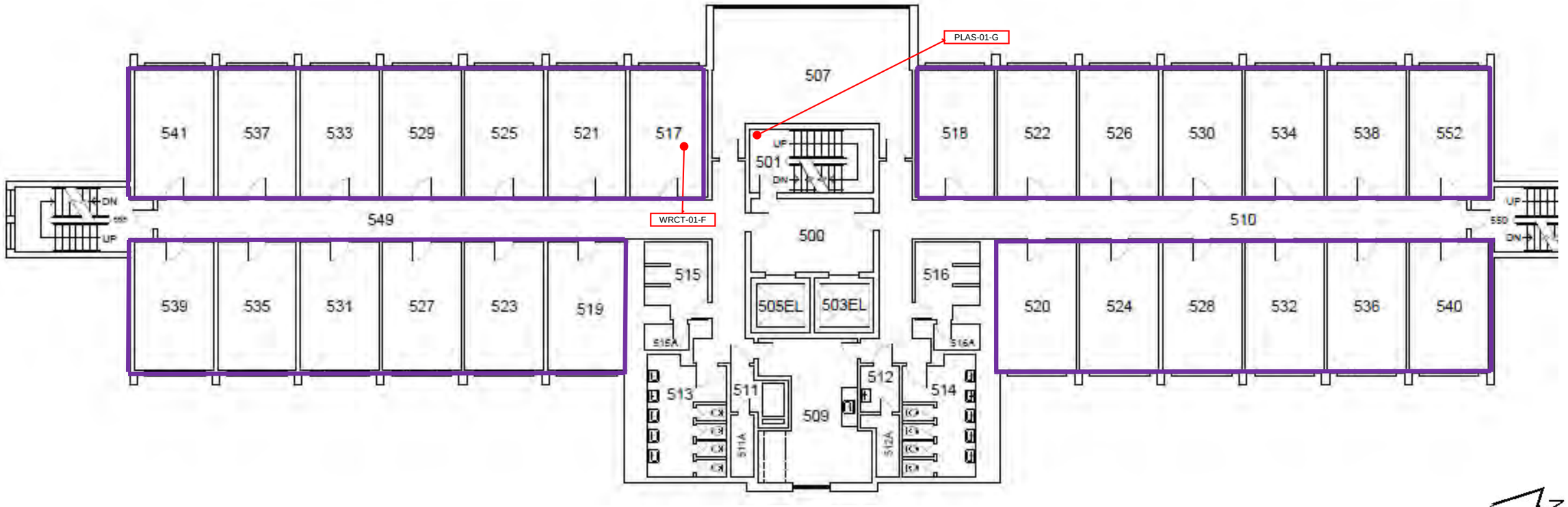
1. Pipe insulation in vertical plumbing pipe chases (411A, 412A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 400 and 417T (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 6
Fourth Floor
Sample and ACM Locations
Orton Hall

Figure 7
Fifth Floor – Sample and ACM Locations



N

Not to scale

Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (511A, 512A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 500 (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

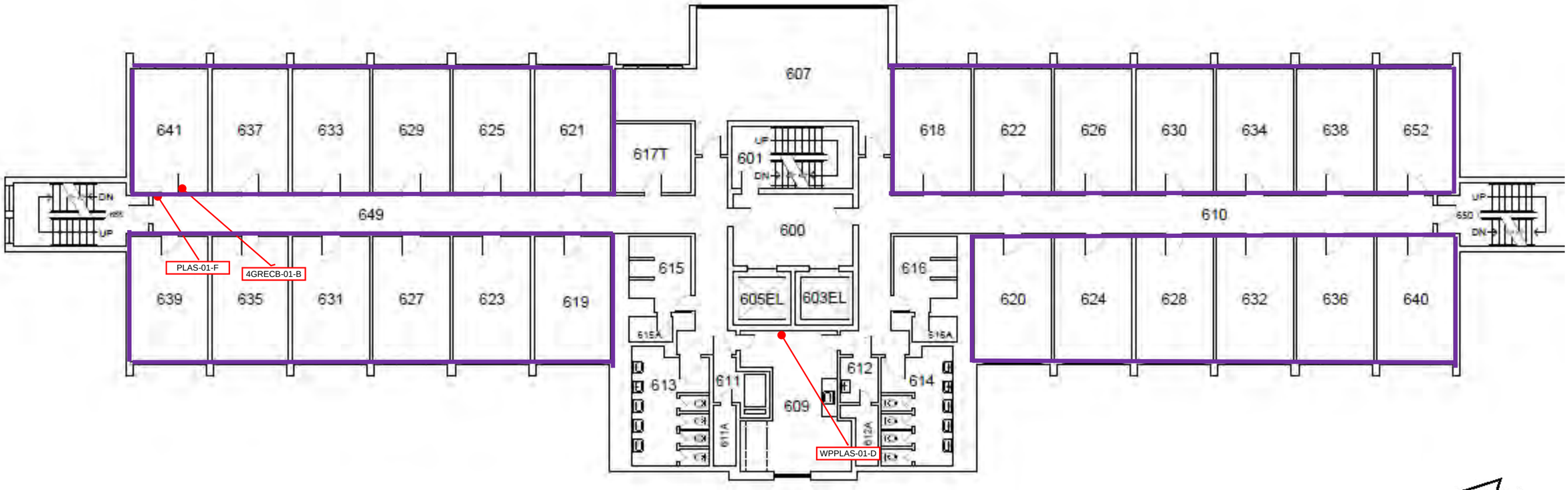
ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 7
Fifth Floor
Sample and ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 8
Sixth Floor – Sample and ACM Locations



Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (611A, 612A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 600 and 617T (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

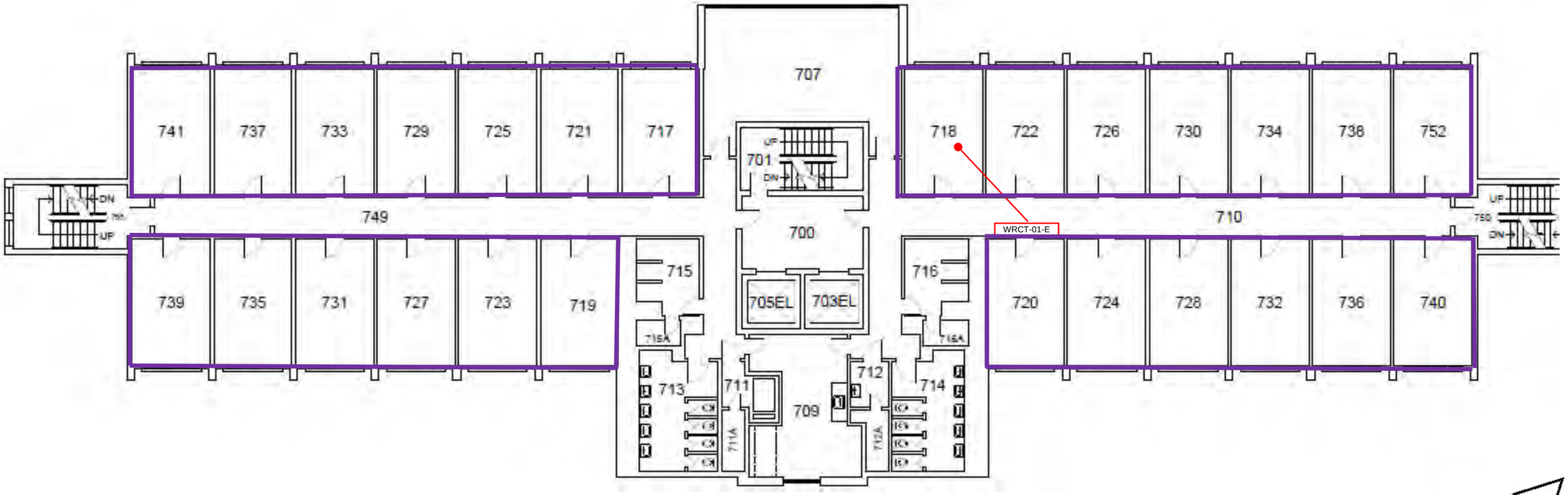
ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 8
Sixth Floor
Sample and ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 9
Seventh Floor – Sample and ACM Locations



N

Not to scale

Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (711A, 712A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 700 and 718 (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

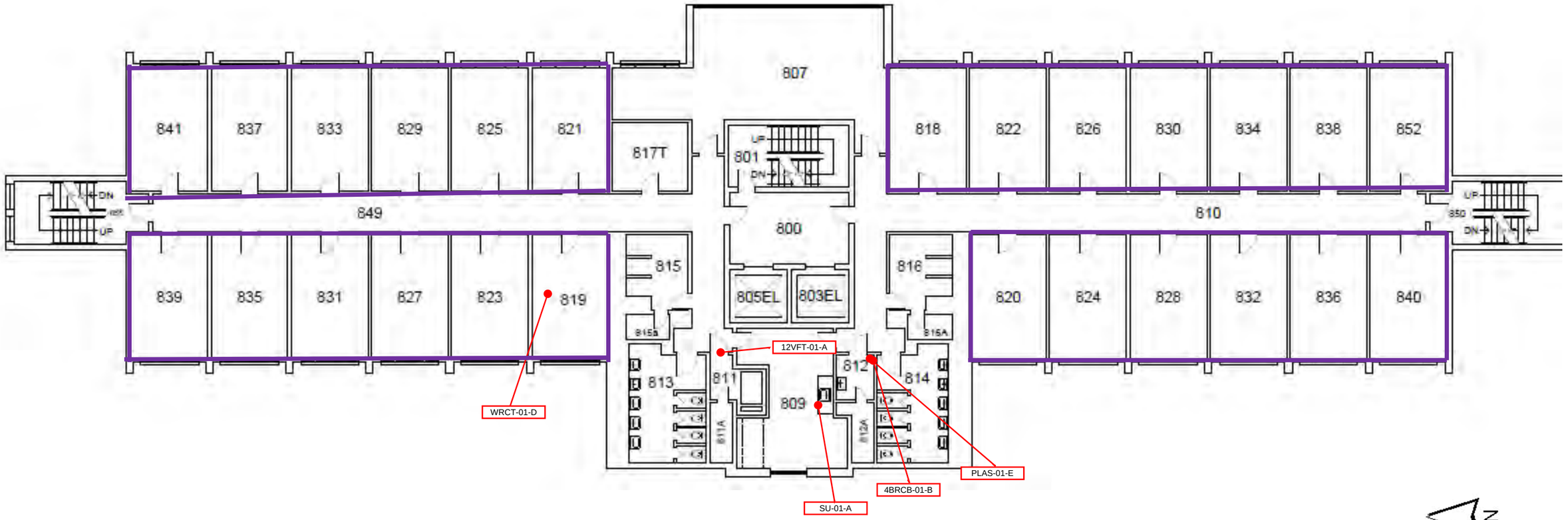
ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 9
Seventh Floor
Sample and ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 10
Eighth Floor – Sample and ACM Locations



N

Not to scale

Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (811A, 812A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 800 and 817T (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 11
Ninth Floor – Sample and ACM Locations

Not to scale

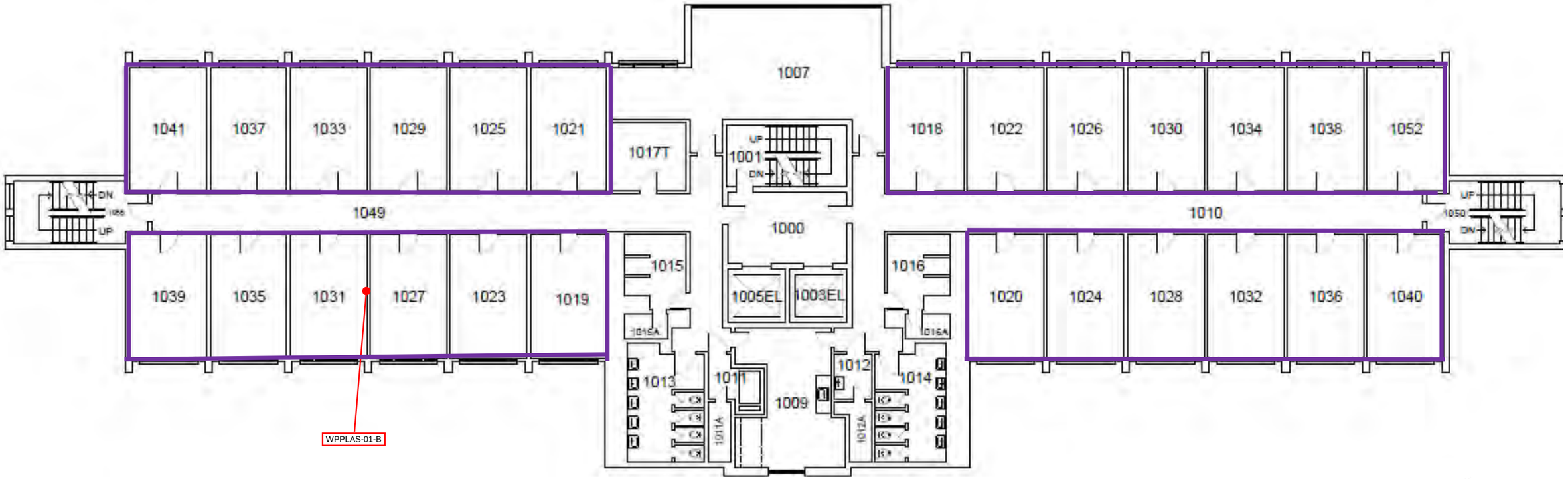
Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (911A, 912A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 900 and 918 (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 12
Tenth Floor – Sample and ACM Locations



N

Not to scale

Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (1011A, 1012A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 1000 and 1017T (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 13
Eleventh Floor – Sample and ACM Locations

N

Not to scale

Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases (1111A, 1112A) and in radiator heating loop.
2. Sink undercoat in laundry rooms throughout building.
3. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 1100 and 1118 (assumed).
4. Metal entrance and stairwell doors labeled with fire rating (assumed).

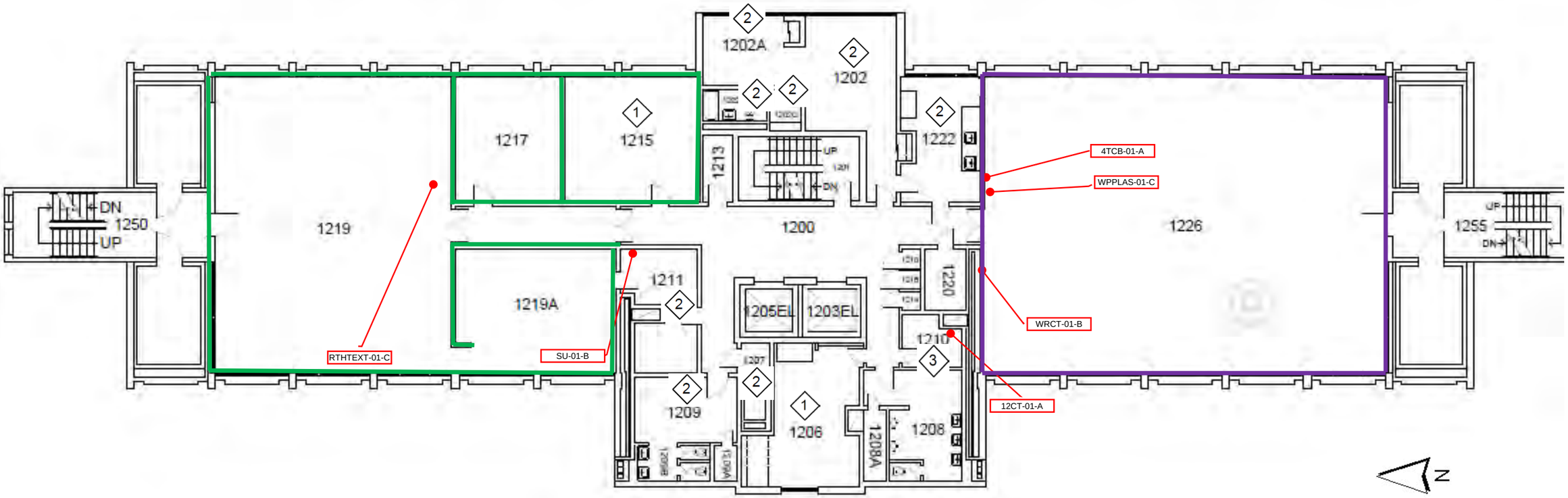
ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Figure 13
Eleventh Floor
Sample and ACM Locations
Orton Hall

Washington State University
Pullman, Washington

Figure 14
Twelfth Floor – Sample and ACM Locations



Additional ACMs/Assumed ACMs:

1. Pipe insulation in vertical plumbing pipe chases and in radiator heating loop.
2. Tan-yellow pebble pattern countertop with yellow adhesive and gray backing in room 1210.
3. Sink undercoat in room 1211.
4. Mirror mastic behind 2 ft. by 5.5 ft. mirror at 1200 and 1208 (assumed).
5. Metal entrance and stairwell doors labeled with fire rating (assumed).
6. Reflective heat shield paper in round lights in1200 corridors (assumed).

ACM Key

Ceiling texture: white lumpy pattern applied to gray plaster in dormitory rooms

Ceiling texture: white thick fibrous over gray plaster in lounge and storage rooms

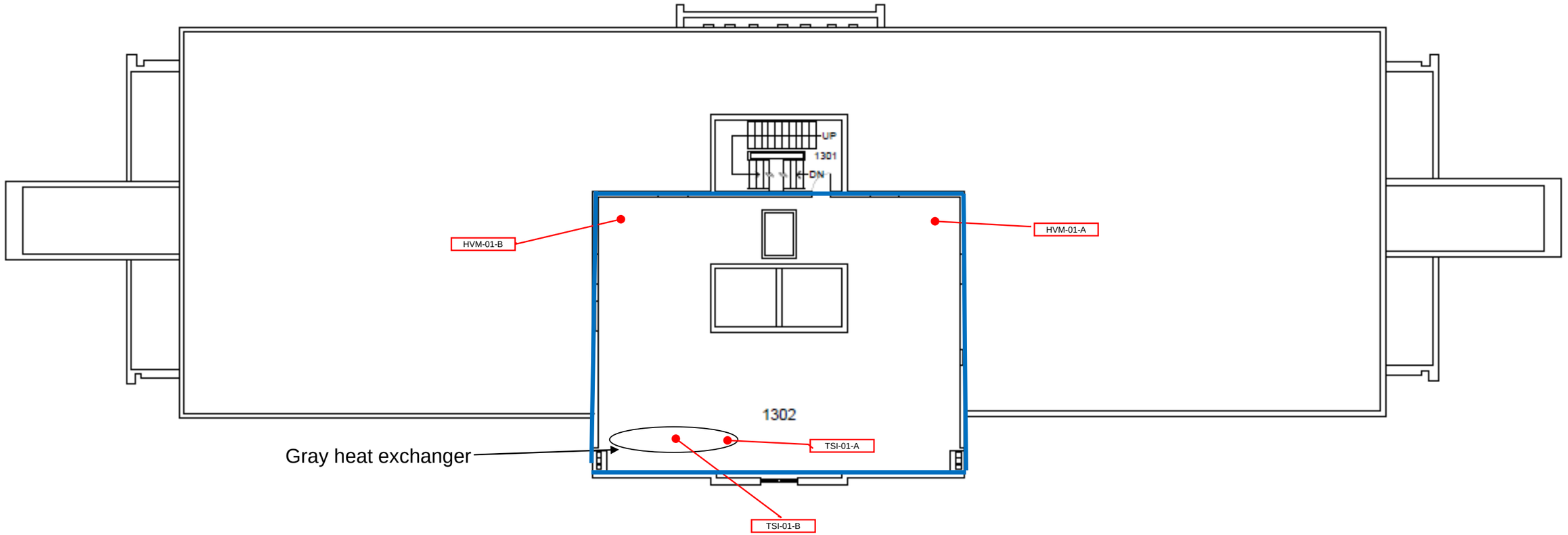
1 **9-inch asbestos vinyl tile** under carpet

2 9-inch white and gray streak vinyl tile and **associated black mastic**

3 **9-inch light orange with brown and white streak vinyl tile and associated black mastic**

Figure 14
Twelfth Floor
Sample and ACM Locations
Orton Hall

Figure 15
Thirteenth Floor – Sample and ACM Locations



N

Not to scale

ACM Key

Pipe insulation (4-inch to 12-inch) and domestic water lines (hard mag-type with mudded fittings along walls).

Legend
P-## = Asbestos sample location (red)

Figure 15
Thirteenth Floor
Sample and ACM Locations
Orton Hall

APPENDIX A
Photographic Log

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Orton Hall	**Date:** May 2020

Photo No.
1

Location:
Room 127.

Description:

Pipe insulation (mudded/plaster elbows and either magnesia block insulation or fiberglass straight pipe runs)**.**

Photo No.
2

Location:
Mechanical room 1302

Description:

Tank insulation on gray heat exchanger.

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG	
Good Faith Survey	Orton Hall	**Date:** May 2020

Photo No. **3**	
Location Room 121N.	
Description: **Ceiling texture– thin white paint coating** on concrete deck (ridge-flat pattern).	

Photo No. **4**	
Location: Lounge 1226	
Description: **Ceiling texture** - **white lumpy pattern** applied to gray plaster.	

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Orton Hall	**Date:** May 2020

Photo No. **5**

Location:
Lobby 102

Description:

Ceiling texture - **white thick fibrous** applied to gray plaster.

Photo No. **6**

Location:
107 corridor

Description:

9-inch gray-white vinyl floor tile and associated black mastic. The 9-inch tile is also under carpet in some rooms.

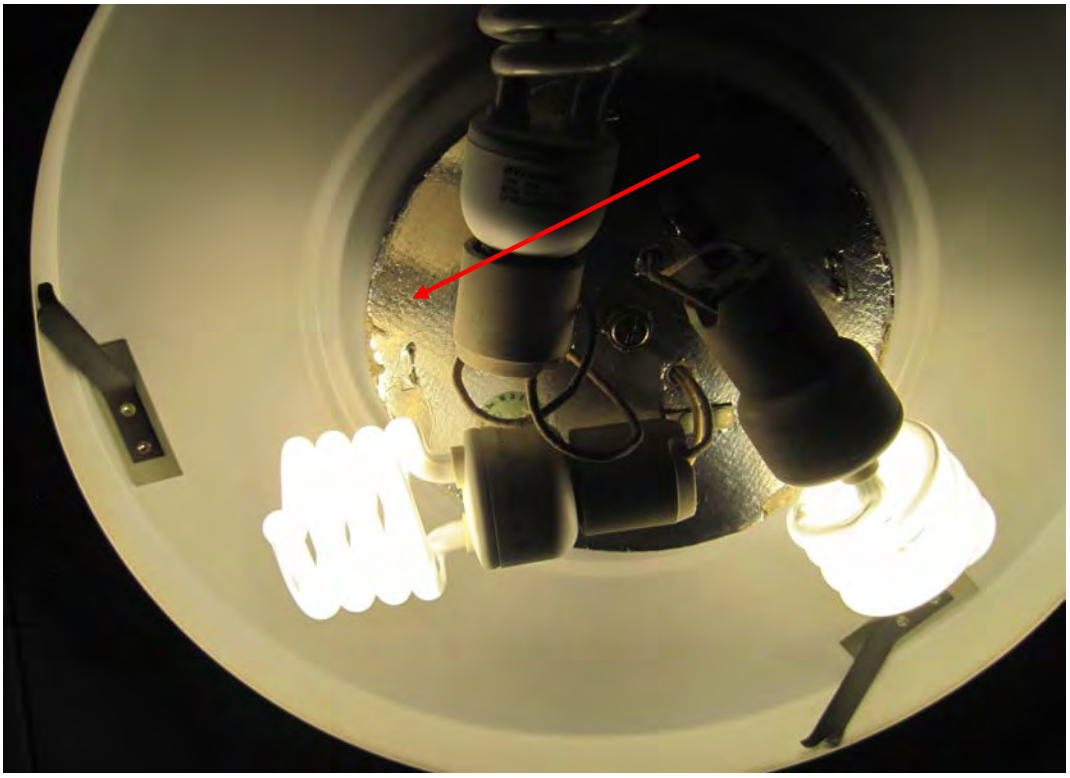
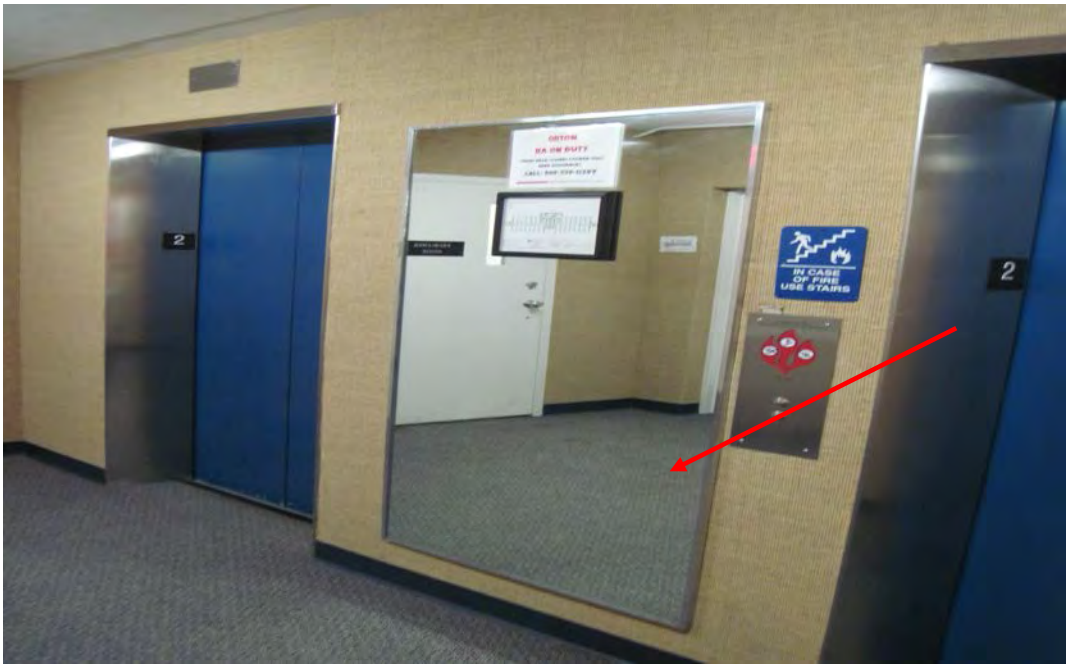
Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Orton Hall	**Date:** May 2020

Photo No. **7**	
Location: Room 1210	
Description: **9-inch orange with brown and white streak vinyl floor tile and associated black mastic.**	
Photo No. **8**	
Location: Room 119	
Description: Tan-yellow pebble pattern sheet vinyl countertops and shelves with **gray paper backing and yellow mastic**	

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Orton Hall	**Date:** May 2020

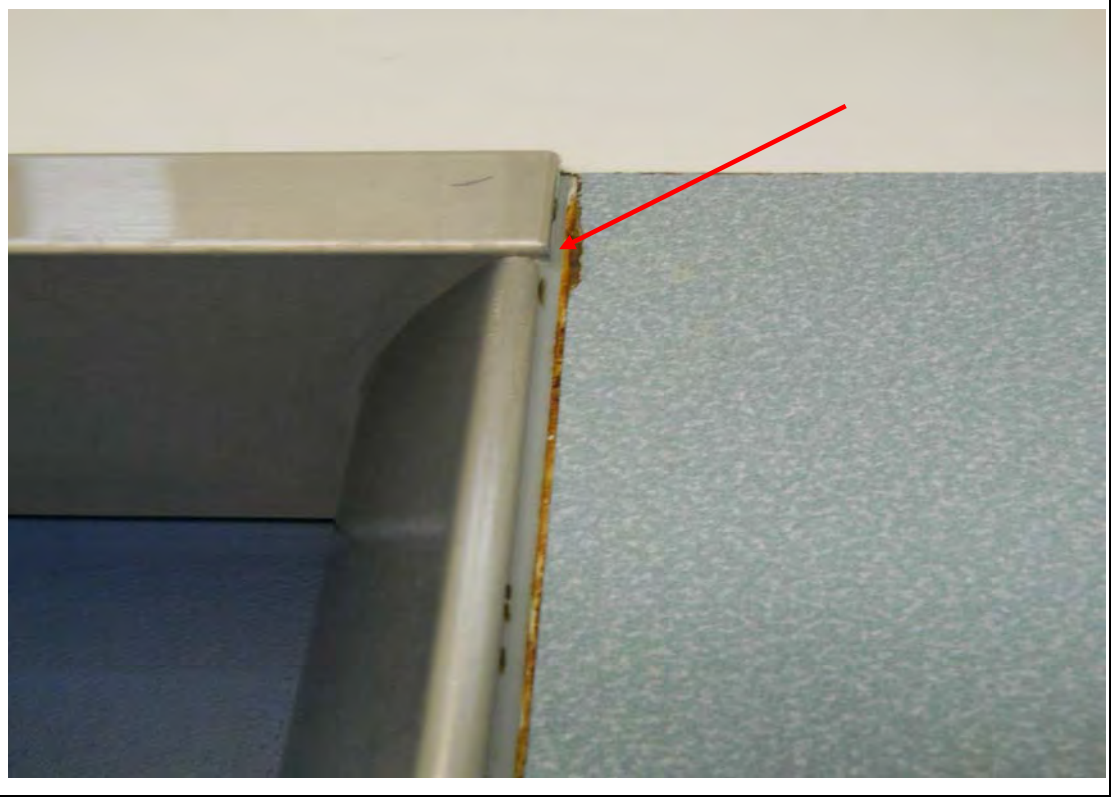
Photo No. **9**	
Location: Room 113	
Description: Tan-yellow linoleum with brown adhesive and **residual black mastic.**	
Photo No. **10**	
Location: Laundry room 309	
Description: **Black sink undercoat**	

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Orton Hall	**Date:** May 2020

Photo No. **11**	
Location: Corridor 1200.	
Description: **Reflective heat shield paper** in round lights (assumed).	
Photo No. **12**	
Location: 200 elevator.	
Description: **Mirror mastic** behind 2 ft. by 5.5 ft. mirrors **(**assumed).	

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Orton Hall	**Date:** May 2020

Photo No. **13**	
Location: Exterior west end.	
Description: **White-gray cement board panels** in wall sections and behind pebble-texture panels (assumed).	

Photo No. **14**	
Location: 102A elevator.	
Description: **Yellow mastic** under plastic wall panel (assumed).	

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Orton Hall	**Date:** May 2020

Photo No.
15

Location:
Room 1017T

Description:

Brown brittle mastic associated with all 4-inch vinyl cove base throughout Orton Hall contains <1% asbestos

Photo No.
16

Location:
Corridor 449

Description:

Dorm room corridors have been refinished since original construction. ACM 9-inch floor tiles were removed and replaced with carpeting shown.

APPENDIX B

Table Summary of Asbestos Sampling and Analytical Results

TABLE SUMMARY OF ASBESTOS SAMPLING AND ANALYTICAL RESULTS
ORTON HALL

Sample #	Building Name	Build. #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM ?	Homogenous Material Location
CEILING FINISHES												
PC-01-A	Orton	0087	119	Ceiling texture	White-tan thin paint coating (ridge-flat pattern)	Surf.	2,500	SF	**Sample PC-01-D contains 2% CHR**	ND	**Yes**	119, 121N, 121S, 125, 127
PC-01-B	Orton	0087	121N	Ceiling texture	White-tan thin paint coating (ridge-flat pattern)	Surf.	2,500	SF	**Sample PC-01-D contains 2% CHR**	ND	**Yes**	119, 121N, 121S, 125, 127
PC-01-C	Orton	0087	127	Ceiling texture	White-tan thin paint coating (ridge-flat pattern)	Surf.	2,500	SF	**Sample PC-01-D contains 2% CHR**	ND	**Yes**	119, 121N, 121S, 125, 127
PC-01-D	**Orton**	**0087**	**121S**	**Ceiling texture**	**White-tan thin paint coating (ridge-flat pattern)**	**Surf.**	**2,500**	**SF**	**-**	**2% CHR**	**Yes**	**119, 121N, 121S, 125, 127**
PC-01-E	Orton	0087	125	Ceiling texture	White-tan thin paint coating (ridge-flat pattern)	Surf.	2,500	SF	**Sample PC-01-D contains 2% CHR**	ND	**Yes**	119, 121N, 121S, 125, 127
PC-01-F	Orton	0087	125	Ceiling texture	White-tan thin paint coating (ridge-flat pattern)	Surf.	2,500	SF	**Sample PC-01-D contains 2% CHR**	ND	**Yes**	119, 121N, 121S, 125, 127
WRCT-01-A	**Orton**	**0087**	**427**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**5% CHR**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**
WRCT-01-B	**Orton**	**0087**	**1226**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**12% CHR/< 1% ANTH**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**
WRCT-01-C	**Orton**	**0087**	**1142**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**3% CHR**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**
WRCT-01-D	**Orton**	**0087**	**819**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**8% CHR**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**

Sample #	Building Name	Build. #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM ?	Homogenous Material Location
WRCT-01-E	**Orton**	**0087**	**718**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**7% CHR**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**
WRCT-01-F	**Orton**	**0087**	**517**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**8% CHR**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**
WRCT-01-G	**Orton**	**0087**	**331**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**6% CHR**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**
WRCT-01-H	**Orton**	**0087**	**331**	**Ceiling texture**	**White lumpy ceiling texture**	**Surf.**	**40,000**	**SF**	**Plaster base**	**3% CHR**	**Yes**	**2nd-11th floor student dormitory rooms: 218-242, 317-342, 418-442, 517-552, 618-652, 717-752, 818-852, 917-952, 1018-1052, 1117-1142 and 1226**
RTHTEXT-01-A	**Orton**	**0087**	**107 North end**	**Ceiling texture**	**White thick fibrous ceiling texture**	**Surf.**	**4,000**	**SF**	**Plaster base**	**4% CHR**	**Yes**	**1st floor: 102, 102S, 102A, 102B, 107, 114 12th floor: 1215, 1217, 1219, 1219A**
RTHTEXT-01-B	**Orton**	**0087**	**102S South end**	**Ceiling texture**	**White thick fibrous ceiling texture**	**Surf.**	**4,000**	**SF**	**Plaster base**	**5% CHR**	**Yes**	**1st floor: 102, 102S, 102A, 102B, 107, 114 12th floor: 1215, 1217, 1219, 1219A**
RTHTEXT-01-C	**Orton**	**0087**	**1219**	**Ceiling texture**	**White thick fibrous ceiling texture**	**Surf.**	**4,000**	**SF**	**Plaster base**	**8% CHR**	**Yes**	**1st floor: 102, 102S, 102A, 102B, 107, 114 12th floor: 1215, 1217, 1219, 1219A**
12CT-01-A	Orton	0087	1210	Ceiling tile	Layer 1: 12-inch white fibrous multi small dot ceiling tile Layer 2: Brown hard puck mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	2nd – 11th floors hallways and 12th floor
12CT-01-B	Orton	0087	407	Ceiling tile	Layer 1: 12-inch white fibrous multi small dot ceiling tile Layer 2: Brown hard puck mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	2nd – 11th floors hallways and 12th floor
FLOORING FINISHES												
YTLN-01-A	**Orton**	**0087**	**113**	**Linoleum flooring**	Layer 1: Tan-yellow linoleum Layer 2: Brown adhesive **Layer 3: Paper backing and black mastic**	**Misc.**	**50**	**SF**	**Residual black mastic**	Layer 1: ND Layer 2: ND **Layer 3: 2% CHR**	**Yes**	**113**
CPTMY-01-A	Orton	0087	125	Carpet mastic	Yellow soft mastic	Misc.		SF	-	ND	No	Carpeted rooms: 1st – 12th floors
CPTMY-01-B	Orton	0087	1142	Carpet mastic	Yellow soft mastic	Misc.		SF	-	ND	No	Carpeted rooms: 1st – 12th floors

Sample #	Building Name	Build. #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM ?	Homogenous Material Location
12VFT-01-A	Orton	0087	@ 811	Vinyl floor tile	Layer 1: 12-inch light gray with tan vinyl floor tile Layer 2: Yellow mastic Layer 3: White mastic Layer 4: Gray float	Misc.		SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	2nd – 11th floors: Central area hallways
THERMAL SYSTEM INSULATION												
TSI-01-A	**Orton**	**0087**	**1302**	**Heat exchanger**	**White-gray fibrous insulation**	**TSI**	**50**	**SF**	**End of tank**	**23% CHR**	**Yes**	**1302: Mechanical room**
TSI-01-B	**Orton**	**0087**	**1302**	**Heat exchanger**	**White-gray fibrous insulation**	**TSI**	**50**	**SF**	**Top of tank**	**27% CHR**	**Yes**	**1302: Mechanical room**
WALL FINISHES												
PLAS-01-A	Orton	0087	121S	Plaster system	Layer 1: White skim coat Layer 2: Gray scratch coat	Surf.	40,000	SF	-	Layer 1: ND Layer 2: ND	No	Dominant wall system throughout the building
PLAS-01-B	Orton	0087	109	Plaster system	Layer 1: White skim coat Layer 2: Gray scratch coat Layer 3: Tan mastic	Surf.	40,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Dominant wall system throughout the building
PLAS-01-C	Orton	0087	165A	Plaster system	Layer 1: White skim coat Layer 2: Gray scratch coat	Surf.	40,000	SF	-	Layer 1: ND Layer 2: ND	No	Dominant wall system throughout the building
PLAS-01-D	Orton	0087	926	Plaster system	Layer 1: Tan soft mastic Layer 2: Brown mastic Layer 3: White skim coat Layer 4: Gray scratch coat	Surf.	40,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Dominant wall system throughout the building
PLAS-01-E	Orton	0087	812	Plaster system	Layer 1: White skim coat Layer 2: Gray scratch coat	Surf.	40,000	SF	-	Layer 1: ND Layer 2: ND	No	Dominant wall system throughout the building
PLAS-01-F	Orton	0087	@641	Plaster system	Layer 1: Tan soft mastic Layer 2: White skim coat and scratch coat	Surf.	40,000	SF	-	Layer 1: ND Layer 2: ND	No	Dominant wall system throughout the building
PLAS-01-G	Orton	0087	501 stairwell	Plaster system	Layer 1: Brown mastic Layer 2: White skim coat Layer 3: Gray scratch coat	Surf.	40,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Dominant wall system throughout the building
WPPLAS-01-A	Orton	0087	900@ elevator	Plaster system	Layer 1: Tan mastic Layer 2: Tan-yellow burlap Layer 3: White mastic Layer 4: White skim coat Layer 5: Gray scratch coat	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND Layer 5: ND	No	Lobbies, student dormitory rooms, and lounges throughout building
WPPLAS-01-B	Orton	0087	1031	Plaster system	Layer 1: White wallpaper and tan mastic Layer 2: White skim coat and gray scratch coat	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND	No	Lobbies, student dormitory rooms, and lounges throughout building
WPPLAS-01-C	Orton	0087	1226	Plaster system	Layer 1: Blue wallpaper with yellow mastic Layer 2: Brown mastic Layer 3: White skim coat Layer 4: Gray scratch coat	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Lobbies, student dormitory rooms, and lounges throughout building
WPPLAS-01-D	Orton	0087	609	Plaster system	Layer 1: Tan mastic Layer 2: White wallpaper Layer 3: White skim coat Layer 4: Gray scratch coat	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Lobbies, student dormitory rooms, and lounges throughout building

Sample #	Building Name	Build. #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM ?	Homogenous Material Location
WPPLAS-01-E	Orton	0087	224	Plaster system	Layer 1: White wallpaper Layer 2: Tan mastic Layer 3: White skim coat Layer 4: Gray scratch coat	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Lobbies, student dormitory rooms, and lounges throughout building
4GRECB-01-A	**Orton**	**0087**	**@ 1140**	**Cove base system**	Layer 1: 4-inch green cove base Layer 2: Tan soft mastic **Layer 3: Brown brittle mastic** Layer 4: Yellow mastic Layer 5: Gray plaster	**Misc.**	**-**	**SF**	**-**	Layer 1: ND Layer 2: ND **Layer 3: < 1% ANTH** Layer 4: ND Layer 5: ND	**No**	**Hallways: 2nd through 11th floors**
4GRECB-01-B	Orton	0087	@ 641	Cove base system	Layer 1: 4-inch green cove base Layer 2: Tan soft mastic Layer 3: White skim coat Layer 4: Gray scratch coat Layer 5: Brown brittle mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND Layer 5: ND	No	Hallways: 2nd through 11th floors
4BRCB-01-A	**Orton**	**0087**	**121S**	**Cove base system**	Layer 1: 4-inch brown cove base **Layer 2: Brown brittle mastic** Layer 3: White skim coat	**Misc.**	**-**	**SF**	**-**	Layer 1: ND **Layer 2: < 1% ANTH** Layer 3: ND	**No**	**1st floor, 2nd-11th floors central rooms, 12th floor**
4BRCB-01-B	**Orton**	**0087**	**812**	**Cove base system**	Layer 1: 4-inch brown cove base **Layer 2: Brown brittle mastic** Layer 3: White skim coat	**Misc.**	**-**	**SF**	**-**	Layer 1: ND **Layer 2: < 1% ANTH** Layer 3: ND	**No**	**1st floor, 2nd-11th floors central rooms, 12th floor**
4BLCB-01-A	Orton	0087	109	Cove base system	Layer 1: 4-inch black cove base Layer 2: Tan soft mastic Layer 3: Brown brittle mastic Layer 4: White skim coat	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	1st floor and 2nd -11th floor student dormitory rooms
4BLCB-01-B	Orton	0087	926 @ door	Cove base system	Layer 1: 4-inch black cove base Layer 2: Brown brittle mastic Layer 3: Tan soft mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	1st floor and 2nd -11th floor student dormitory rooms
4TCB-01-A	**Orton**	**0087**	**1226**	**Cove base system**	Layer 1: 4-inch tan cove base **Layer 2: Brown brittle mastic** Layer 3: Gray plaster	**Misc.**	**-**	**SF**	**-**	Layer 1: ND **Layer 2: < 1% ANTH** Layer 3: ND	**No**	**12th floor**
4GRCB-01-A	Orton	0087	102S	Cove base system	Layer 1: 4-inch gray cove base with mastic Layer 2: White skim coat	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	1st floor
4TCERT-01-A	Orton	0087	123	Ceramic tile system	Layer 1: Tan ceramic tile Layer 2: White caulk Layer 3: Gray plaster Layer 4: Gray mortar	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	123 and bathrooms
MISCELLANEOUS FINISHES												
SU-01-A	Orton	0087	809	Sink undercoat	White sink undercoat	Misc.	13	EA	**Sample SU-01-B contains 2% CHR**	ND	**Yes**	117, 209, 309, 409, 509, 609, 709, 809, 909, 1009, 1109, 1211
SU-01-B	**Orton**	**0087**	**1211**	**Sink undercoat**	**Black sink undercoat**	**Misc.**	**13**	**EA**	**-**	**2% CHR**	**Yes**	**117, 209, 309, 409, 509, 609, 709, 809, 909, 1009, 1109, 1211**
HVM-01-A	Orton	0087	1302 south	Mastic	Layer 1: Yellow foam insulation Layer 2: Black mastic	Misc.	-	SF	HVAC system: unit #1	Layer 1: ND Layer 2: ND	No	1302: Mechanical room

Sample #	Building Name	Build. #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM ?	Homogenous Material Location
HVM-01-B	Orton	0087	1302 north	Mastic	Yellow foam insulation, mastic and foil	Misc.	-	SF	HVAC system: unit #2	ND	No	1302: Mechanical room
TFC-01-A	Orton	0087	119	Duct connector	Tan-gray woven fabric and paint	Misc.	-	SF	-	ND	No	HVAC/diffusers throughout building
VCT-01-A	**Orton**	**0087**	**119**	**Vinyl counter tops**	Layer 1: Tan-yellow pebble pattern vinyl **Layer 2: Yellow adhesive and gray backing**	**Misc.**	**150**	**SF**	**Countertop shelving**	Layer 1: ND **Layer 2: 36% CHR**	**Yes**	**119 and 1210**
HB-01-A	Orton	0087	161	Furnace brick	Layer 1: Gray brick Layer 2: Clear adhesive	Misc.	-	SF	Furnace exterior trim	Layer 1: ND Layer 2: ND	No	161: mechanical room
PREVIOUS SAMPLING: WSU EH&S JANUARY 2017 AND NOVEMBER 2018												
*PLAS-01-A	Orton	0087	123	Plaster system	White skim coat with gray scratch coat	Surf.	50	SF	-	ND	No	123
*PLAS-01-B	Orton	0087	123	Plaster system	White skim coat with gray scratch coat	Surf.	50	SF	-	ND	No	123
*PLAS-01-C	Orton	0087	123	Plaster system	White skim coat with gray scratch coat	Surf.	50	SF	-	ND	No	123
CT-01-A	**Orton**	**0087**	**123**	**Ceramic tile system**	Layer 1: Tan ceramic tile Layer 2: Gray scratch coat Layer 3: White caulk **Layer 4: Yellow mastic**	**Misc.**	**50**	**SF**	**South wall**	Layer 1: ND Layer 2: ND Layer 3: ND **Layer 4: 5% CHR**	**Yes**	**123 (removed in 2018)**
CT-01-B	**Orton**	**0087**	**123**	**Ceramic tile system**	Layer 1: Tan ceramic tile Layer 2: Gray scratch coat Layer 3: White caulk **Layer 4: Yellow mastic**	**Misc.**	**50**	**SF**	**South wall**	Layer 1: ND Layer 2: ND Layer 3: ND **Layer 4: 6% CHR**	**Yes**	**123 (removed in 2018)**
CT-01-C	**Orton**	**0087**	**123**	**Ceramic tile system**	Layer 1: Tan ceramic tile Layer 2: Gray scratch coat Layer 3: White caulk **Layer 4: Yellow mastic**	**Misc.**	**50**	**SF**	**South wall**	Layer 1: ND Layer 2: ND Layer 3: ND **Layer 4: 5% CHR**	**Yes**	**123 (removed in 2018)**
P03955	**Orton**	**0087**	**102**	**Ceiling texture**	**White ceiling texture**	**Surf.**	**500**	**SF**	**-**	**4% CHR**	**Yes**	**102**

Notes:

CHR = Chrysotile asbestos
AMO = Amosite asbestos
ANTH = Anthophyllite asbestos
NA = Not Analyzed
ND = Asbestos was not detected in sample
SF = Square feet
EA = Each
LF = Linear feet
Misc. = Miscellaneous material
Surf. = Surfacing material
TSI = Thermal systems insulation
ACM = Asbestos-containing material
Bold = Sample contains asbestos

APPENDIX C

Table Summary of Lead Paint Sampling

TABLE SUMMARY OF LEAD PAINT SAMPLING
ORTON HALL

Sample #	Building Name	Building #	Sample Location (Room #)	Paint Color	Substrate	Component	Results (mg/kg)	Reporting limit (mg/kg)	Lead-containing
PB-01	Orton	0087	401S stairwell	White	Metal	Door frame	< 180	180	No
PB-02	Orton	0087	755 stairwell	White	Concrete	Wall	< 73	73	No
PB-03	**Orton**	**0087**	**111**	**White-cream**	**Plaster**	**Ceiling**	**680**	**48**	**Yes**
PB-04	**Orton**	**0087**	**127**	**Tan**	**Plaster**	**Wall**	**850**	**48**	**Yes**
PB-05	Orton	0087	Exterior west	White-cream	Concrete	Wall	< 190	190	No
PB-06	**Orton**	**0087**	**Exterior east**	**White-cream**	**Concrete**	**Wall**	**100**	**49**	**Yes**

Results by EPA Method SW 846-3051 analysis are reported in mg/kg lead

APPENDIX D

Asbestos and Lead Chain-of-Custody Forms and Laboratory Analytical Results

May 13, 2020

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2007998.00

Client Project: 6543-7358
Location: Orton Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 23 sample(s) submitted to our laboratory for analysis on 5/5/2020.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Matt Macfarlane, Asbestos Lab Supervisor

Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007998.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Lab ID: 20059501 **Client Sample #: PC-01-A**
Location: Orton Hall

Layer 1 of 1 **Description:** Thin white crumbly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint/Binder, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 20059502 **Client Sample #: PC-01-B**
Location: Orton Hall

Layer 1 of 1 **Description:** Thin white crumbly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint/Binder, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 20059503 **Client Sample #: PC-01-C**
Location: Orton Hall

Layer 1 of 1 **Description:** White brittle material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Paint	None Detected ND	**None Detected ND**

Lab ID: 20059504 **Client Sample #: PC-01-D**
Location: Orton Hall
Comments: Small sample size.

Layer 1 of 1 **Description:** Trace amount of white compacted powdery material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	None Detected ND	**Chrysotile 2%**
Paint		

Lab ID: 20059505 **Client Sample #: PC-01-E**
Location: Orton Hall

Sampled by: Client
Analyzed by: Akane Yoshikawa **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007998.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Layer 1 of 1 **Description:** White brittle material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	None Detected ND	**None Detected ND**
Paint		

Lab ID: 20059506 **Client Sample #: RTHTEXT-01-A**
Location: Orton Hall

Layer 1 of 1 **Description:** White lumpy material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	Glass fibers 3%	**Chrysotile 4%**
Paint		

Lab ID: 20059507 **Client Sample #: RTHTEXT-01-B**
Location: Orton Hall

Layer 1 of 1 **Description:** White lumpy material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	Glass fibers 6%	**Chrysotile 5%**
Paint		

Lab ID: 20059508 **Client Sample #: RTHTEXT-01-C**
Location: Orton Hall

Layer 1 of 1 **Description:** White lumpy material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	Glass fibers 3%	**Chrysotile 8%**
Paint		

Lab ID: 20059509 **Client Sample #: 12CT-01-A**
Location: Orton Hall

Sampled by: Client
Analyzed by: Akane Yoshikawa **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007998.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Layer 1 of 2	**Description:** Off-white fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Glass beads, Paint	Glass fibers	93%	**None Detected ND**
Layer 2 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Fine particles	Glass fibers	3%	**None Detected ND**

Lab ID: 20059510 **Client Sample #: 12CT-01-B**

Location: Orton Hall

Layer 1 of 2	**Description:** Off-white fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Glass beads, Paint	Glass fibers	96%	**None Detected ND**
Layer 2 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Fine grains, Fine particles	Glass fibers	2%	**None Detected ND**
		Cellulose	2%	

Lab ID: 20059511 **Client Sample #: YTLN-01-A**

Location: Orton Hall

Comments: Insufficient sample amount for further analysis (Layer 3).

Layer 1 of 3	**Description:** Beige/yellow vinyl			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Vinyl/Binder, Fine particles	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** White fibrous material with yellow adhesive			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine grains, Fine particles	Cellulose	39%	**None Detected ND**
	Adhesive/Binder	Glass fibers	8%	

Sampled by: Client
Analyzed by: Akane Yoshikawa **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASB-02

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007998.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 3 of 3 **Description:** Trace amount of black asphaltic mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Fine grains, Fine particles	Cellulose 4%	**Chrysotile 2%**

Lab ID: 20059512 **Client Sample #: CPTMY-01-A**

Location: Orton Hall

Layer 1 of 1 **Description:** Yellow soft adhesive

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Adhesive/Binder, Fine particles	Cellulose 2%	**None Detected ND**

Lab ID: 20059513 **Client Sample #: CPTMY-01-B**

Location: Orton Hall

Comments: Unable to separate mastics for analysis.

Layer 1 of 1 **Description:** Brown brittle mastic with yellow soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine grains, Fine particles	Cellulose 2%	**None Detected ND**

Lab ID: 20059514 **Client Sample #: 12VFT-01-A**

Location: Orton Hall

Layer 1 of 4 **Description:** Gray vinyl tile

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine grains, Fine particles	None Detected ND	**None Detected ND**

Layer 2 of 4 **Description:** Yellow soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine grains, Fine particles	None Detected ND	**None Detected ND**

Layer 3 of 4 **Description:** White soft material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Akane Yoshikawa **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007998.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Layer 4 of 4	**Description:** Thin gray crumbly material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine grains, Fine particles	Cellulose <1%	**None Detected ND**

Lab ID: 20059515 **Client Sample #: SV-01-A**
Location: Orton Hall

Layer 1 of 1	**Description:** Gray flaky material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine grains, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 20059516 **Client Sample #: SV-01-B**
Location: Orton Hall

Layer 1 of 1	**Description:** Black asphaltic flaky material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Asphalt/Binder, Fine grains, Fine particles	None Detected ND	**Chrysotile 2%**

Lab ID: 20059517 **Client Sample #: HVM-01-A**
Location: Orton Hall

Layer 1 of 2	**Description:** Yellow fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler	Glass fibers 96%	**None Detected ND**
Layer 2 of 2	**Description:** Black asphaltic fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Asphalt/Binder, Fine particles	Glass fibers 29%	**None Detected ND**

Lab ID: 20059518 **Client Sample #: HVM-01-B**
Location: Orton Hall

Sampled by: Client
Analyzed by: Akane Yoshikawa **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007998.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 1 **Description:** Black asphaltic fibrous material with silver foil

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Fine particles, Metal foil	Glass fibers 23%	**None Detected ND**

Lab ID: 20059519 **Client Sample #: TFC-01-A**
Location: Orton Hall

Layer 1 of 1 **Description:** Black rubbery material embedded with white fibrous mesh and paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Paint	Glass fibers 18%	**None Detected ND**

Lab ID: 20059520 **Client Sample #: VCT-01-A**
Location: Orton Hall

Layer 1 of 2 **Description:** Beige vinyl

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine grains, Fine particles	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** White fibrous material with yellow mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	None Detected ND	**Chrysotile 36%**
Mastic/Binder		

Lab ID: 20059521 **Client Sample #: HB-01-A**
Location: Orton Hall

Layer 1 of 2 **Description:** Gray brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Clear soft material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Akane Yoshikawa **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007998.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 23
Samples Analyzed: 23
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 20059522 **Client Sample #: TSI-01-A**
Location: Orton Hall

Layer 1 of 1 **Description:** White flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Glass beads, Fine grains	Glass fibers 12%	**Chrysotile 23%**
Fine particles	Cellulose 8%	

Lab ID: 20059523 **Client Sample #: TSI-01-B**
Location: Orton Hall

Layer 1 of 1 **Description:** White flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Glass beads, Fine grains	Glass fibers 14%	**Chrysotile 27%**
Fine particles	Cellulose 4%	

Sampled by: Client
Analyzed by: Akane Yoshikawa **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

Company	Washington State University EH&S	**NVL Batch Number**	**2007998.00**
Address	PO Box 641172	**TAT**	5 Days **AH** No
	Pullman, WA 99164-1172	**Rush TAT**	
Project Manager	Mr. Matt McKibbin	**Due Date**	5/12/2020 **Time** 4:00 PM
Phone	(509) 335-3041	**Email**	mrmckibbin@wsu.edu
Direct	(509) 335-5311	**Fax**	(509) 730-5548

Project Name/Number: 6543-7358 **Project Location:** Orton Hall

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 23 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	20059501	PC-01-A		A
2	20059502	PC-01-B		A
3	20059503	PC-01-C		A
4	20059504	PC-01-D		A
5	20059505	PC-01-E		A
6	20059506	RTHTEXT-01-A		A
7	20059507	RTHTEXT-01-B		A
8	20059508	RTHTEXT-01-C		A
9	20059509	12CT-01-A		A
10	20059510	12CT-01-B		A
11	20059511	YTLN-01-A		A
12	20059512	CPTMY-01-A		A
13	20059513	CPTMY-01-B		A
14	20059514	12VFT-01-A		A
15	20059515	SV-01-A		A
16	20059516	SV-01-B		A
17	20059517	HVM-01-A		A
18	20059518	HVM-01-B		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	5/5/20	1600
Analyzed by	Akane Yoshikawa		NVL	5/12/20	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 5/5/2020
Time: 4:17 PM
Entered By: Fatima Khan

ASBESTOS LABORATORY SERVICES

Company	Washington State University EH&S	**NVL Batch Number**	**2007998.00**
Address	PO Box 641172	**TAT**	5 Days **AH** No
	Pullman, WA 99164-1172	**Rush TAT**	
Project Manager	Mr. Matt McKibbin	**Due Date**	5/12/2020 **Time** 4:00 PM
Phone	(509) 335-3041	**Email**	mrmckibbin@wsu.edu
Direct	(509) 335-5311	**Fax**	(509) 730-5548

Project Name/Number: 6543-7358 **Project Location:** Orton Hall

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 23 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	20059519	TFC-01-A		A
20	20059520	VCT-01-A		A
21	20059521	HB-01-A		A
22	20059522	TSI-01-A		A
23	20059523	TSI-01-B		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	5/5/20	1600
Analyzed by	Akane Yoshikawa		NVL	5/12/20	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 5/5/2020
Time: 4:17 PM
Entered By: Fatima Khan

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ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 4 Days
- ☑ 5 Days

Please call for TAT I

2007998

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 6543-7358
Project Location: ORTON HALL

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) -
❑ Fax ( ) -
❑ Email: mrmckibbin@wsu.edu stephan.gilley@wsu.edu

Total Number of Samples 5/

	Sample ID	Description	A/R
1		SEE ATTACHED SHEETS	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Stephan Gilley		WSU EH&S	4-30-2020	14:00
Relinquish by	Stephan Gilley		WSU EH&S	5-1-2020	13:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Kelmalla		Nvllabs	5/5/2020	4pm fedex
Analyzed by					
Called by					
Faxed/Email by					

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
PC-01	Thin paint on concrete ceiling – honeycomb	Surf.	2,500 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: white – tan paint texture Layer 2: Layer 3:	119	YES (NO)	honeycomb ceiling
B	Layer 1: Layer 2: Layer 3:	121N	YES (NO)	
C	Layer 1: Layer 2: Layer 3:	127	YES (NO)	
D	Layer 1: Layer 2: Layer 3:	121S	YES (NO)	
E	Layer 1: Layer 2: Layer 3:	125	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 119, 121S, 121N, 125, 127

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
RTH/TEXT-01	White thick fibrous strand-ridge ceil. texture	Surf.	4000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: white thick ridge-fibrous ceil. texture Layer 2: Layer 3:	107 N. end	(YES) NO	
B	Layer 1: Layer 2: Layer 3:	1025 S. end	(YES) NO	
C	Layer 1: Layer 2: Layer 3:	1219	(YES) NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1st floor: 102, 1025, 1028, 114, 102A, 107
12th floor: 1215, 1217, 1219, 1219A

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
12CF-01	12-inch MARTI SMALL OOT ceiling tile / gra mastic	MISC.	75,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: 12 inch dot ceiling tile Layer 2: brown puck mastic Layer 3:	1210	YES / NO	texture ceiling base
B	Layer 1: Layer 2: Layer 3:	407	YES / NO	
	Layer 1: Layer 2: Layer 3:		YES / NO	
	Layer 1: Layer 2: Layer 3:		YES / NO	
	Layer 1: Layer 2: Layer 3:		YES / NO	
	Layer 1: Layer 2: Layer 3:		YES / NO	
	Layer 1: Layer 2: Layer 3:		YES / NO	

Locations 2nd - 11th floors: hallways, 12th floor

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
YTLN-01	yellow-tan linoleum flooring/ backing	MISC.	50 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: tan-yellow linoleum Layer 2: brown adhesive Layer 3: paper/ backing	113 BT	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 113 bathroom

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
CRTMY-01	Carpet mastic under carpet	MISC.	100,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: Yellow soft mastic Layer 2: Layer 3:	125	YES (NO)	
B	Layer 1: Yellow mastic Layer 2: Layer 3:	1142	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations Under carpeted rooms: 1st, 2nd-11th, 12th floor

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
12VFT-01	12-inch light gray w/ tan + dk gray str. / yellow mastic	MISC.	2,500 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: 12-inch light gray w/ tan... VFT Layer 2: yellow mastic Layer 3:	@ 811	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 2nd – 11th floors: central hallways

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
SU-01	multi-color sink under-coats	MISC.	25 EA

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: white sink undercoat Layer 2: Layer 3:	809	YES (NO)	
B	Layer 1: Black sink undercoat Layer 2: Layer 3:	1211	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1st – 12th floors: kitchen, laundry

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
HVM-01	Heating – ventilation exterior mastic	misc.	100 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: yellow foam insulation Layer 2: black mastic Layer 3:	1302 south	YES (NO)	Unit #1
B	Layer 1: Layer 2: Layer 3:	1302 north	YES (NO)	Unit #2
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1302 mechanical room

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
TFC-01	HVAC flex connector	MISC	250SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: fan - gray woven flex conn. Layer 2: fan paint Layer 3:	119	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations HVAC / diffusers throughout building

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
VCT-01	Tan-yellow pebble pattern vinyl / counter / yellow adhesive / paper	MISC.	1,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: Tan-yellow pebble pattern vinyl Layer 2: yellow adhesive Layer 3: gray backing	119	YES (NO)	Counter tops Shelving
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations Custodial closets

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
HB-01	Gray heat brick	MISC.	25 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: Gray brick Layer 2: Layer 3:	161	YES (NO)	furnace exterior
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 161 mechanical room

2007998

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
TSI-01	Heat exchange tank: white-gray fibrous insulation	TSI	50 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: white-gray fibrous insulation Layer 2: Layer 3:	1302	(YES) NO	end of tank
B	Layer 1: Layer 2: Layer 3:	1302	(YES) NO	top of tank
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1302 = Mechanical room

2007998

May 13, 2020

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2007995.00

Client Project: 6543-7358
Location: Orton Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 28 sample(s) submitted to our laboratory for analysis on 5/5/2020.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Matt Macfarlane, Asbestos Lab Supervisor

Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 20059467 **Client Sample #: PLAS-01-A**

Location: Orton Hall

Comments: Insufficient sample amount for further analysis in layer 1 of this sample.

Layer 1 of 2 **Description:** Trace thin brown brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	Wollastonite 2%	**None Detected ND**

Layer 2 of 2 **Description:** White brittle textured material with cream textured paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles Paint/Binder, Perlite	None Detected ND	**None Detected ND**

Lab ID: 20059468 **Client Sample #: PLAS-01-B**

Location: Orton Hall

Layer 1 of 3 **Description:** Off-white thin soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous particles, Mastic/Binder	None Detected ND	**None Detected ND**

Layer 2 of 3 **Description:** Yellow brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	None Detected ND	**None Detected ND**

Layer 3 of 3 **Description:** White brittle textured material with beige paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Mineral grains Paint	Synthetic fibers <1%	**None Detected ND**

Lab ID: 20059469 **Client Sample #: PLAS-01-C**

Location: Orton Hall

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** White brittle textured material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Off-white sandy/brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Mica, Mineral grains	None Detected	ND	**None Detected ND**
	Sand			

Lab ID: 20059470 **Client Sample #: PLAS-01-D**
Location: Orton Hall

Layer 1 of 4	**Description:** Yellow soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Mastic/Binder	Synthetic fibers	<1%	**None Detected ND**
Layer 2 of 4	**Description:** Brown brittle/soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Wollastonite	3%	**None Detected ND**
		Talc fibers	2%	
Layer 3 of 4	**Description:** White brittle material with cream paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**
Layer 4 of 4	**Description:** Off-white sandy/brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Granules, Mica	None Detected	ND	**None Detected ND**
	Mineral grains, Sand			

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Lab ID: 20059471 **Client Sample #: PLAS-01-E**
Location: Orton Hall

Layer 1 of 2 **Description:** White brittle textured material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Off-white sandy/brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Mica, Mineral grains	None Detected ND	**None Detected ND**
Sand		

Lab ID: 20059472 **Client Sample #: PLAS-01-F**
Location: Orton Hall

Layer 1 of 2 **Description:** Gold soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	Synthetic fibers <1%	**None Detected ND**

Layer 2 of 2 **Description:** Off-white compacted powdery material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Calcareous particles, Fine particles	None Detected ND	**None Detected ND**
Paint		

Lab ID: 20059473 **Client Sample #: PLAS-01-G**
Location: Orton Hall

Layer 1 of 3 **Description:** Brown brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	Wollastonite 4%	**None Detected ND**
	Talc fibers 2%	

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 3	**Description:** White brittle textured material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Off-white sandy/brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Granules, Mica	Cellulose	2%	**None Detected ND**
	Sand	Synthetic fibers	<1%	
		Hair	<1%	

Lab ID: 20059474 **Client Sample #: WPPLAS-01-A**
Location: Orton Hall

Layer 1 of 5	**Description:** Off-white soft material with blue coating			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Calcareous particles, Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 5	**Description:** Tan woven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler	Wood fibers	88%	**None Detected ND**
Layer 3 of 5	**Description:** Cream soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 4 of 5	**Description:** White brittle textured material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**
Layer 5 of 5	**Description:** Off-white sandy/brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Granules, Mica	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Sand

Lab ID: 20059475 **Client Sample #: WPPLAS-01-B**
Location: Orton Hall

Layer 1 of 2 **Description:** Off-white fibrous material with off-white soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Calcareous particles, Mastic/Binder	Synthetic fibers 75%	**None Detected ND**

Layer 2 of 2 **Description:** White brittle textured material with trace thin tan brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Mastic/Binder	None Detected ND	**None Detected ND**

Lab ID: 20059476 **Client Sample #: WPPLAS-01-C**
Location: Orton Hall

Layer 1 of 4 **Description:** Blue and brown wall vinyl with woven mesh and yellow brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Vinyl/Binder	Synthetic fibers 23%	**None Detected ND**

Layer 2 of 4 **Description:** Brown brittle mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	Wollastonite 4%	**None Detected ND**
	Talc fibers 2%	

Layer 3 of 4 **Description:** White brittle textured material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Paint	None Detected ND	**None Detected ND**

Layer 4 of 4 **Description:** Off-white sandy/brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Granules, Mica	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Mineral grains, Sand

Lab ID: 20059477 **Client Sample #: WPPLAS-01-D**
Location: Orton Hall

Layer 1 of 4	**Description:** Yellow soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous particles, Mastic/Binder	Cellulose	<1%	**None Detected ND**
Layer 2 of 4	**Description:** White wall vinyl with woven fibrous mesh and mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Vinyl/Binder, Starch grains	Synthetic fibers	19%	**None Detected ND**
Layer 3 of 4	**Description:** White brittle textured material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles	None Detected	ND	**None Detected ND**
Layer 4 of 4	**Description:** Off-white sandy/brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Granules, Mica Sand	None Detected	ND	**None Detected ND**

Lab ID: 20059478 **Client Sample #: WPPLAS-01-E**
Location: Orton Hall

Layer 1 of 4	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Synthetic fibers	65%	**None Detected ND**
Layer 2 of 4	**Description:** Tan soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 3 of 4	**Description:** White brittle textured material				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Binder/Filler, Fine particles	None Detected	ND	**None Detected**	**ND**
Layer 4 of 4	**Description:** Trace thin off-white sandy/brittle material				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Binder/Filler, Granules, Sand	None Detected	ND	**None Detected**	**ND**

Lab ID: 20059479 **Client Sample #: 4GRECB-01-A**
Location: Orton Hall

Layer 1 of 5	**Description:** Blue rubbery material with trace white paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Paint, Rubber/Binder	None Detected	ND	**None Detected**	**ND**
Layer 2 of 5	**Description:** Off-white soft mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous particles, Mastic/Binder	None Detected	ND	**None Detected**	**ND**
Layer 3 of 5	**Description:** Brown brittle mastic with white paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder, Paint	Wollastonite	5%	**Anthophyllite**	**<1%**
		Talc fibers	2%		
Layer 4 of 5	**Description:** Yellow brittle mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder	None Detected	ND	**None Detected**	**ND**
Layer 5 of 5	**Description:** White brittle textured material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected**	**ND**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Lab ID: 20059480 **Client Sample #: 4GRECB-01-B**

Location: Orton Hall

Layer 1 of 5	**Description:** Blue rubbery material				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Rubber/Binder	None Detected	ND	**None Detected ND**	
Layer 2 of 5	**Description:** Yellow soft mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder	None Detected	ND	**None Detected ND**	
Layer 3 of 5	**Description:** Off-white compacted powdery material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous binder, Calcareous particles, Paint	None Detected	ND	**None Detected ND**	
Layer 4 of 5	**Description:** White brittle textured material				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Binder/Filler, Fine particles	None Detected	ND	**None Detected ND**	
Layer 5 of 5	**Description:** Brown brittle mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder	Wollastonite	3%	**None Detected ND**	
		Talc fibers	2%		

Lab ID: 20059481 **Client Sample #: 4BRCB-01-A**

Location: Orton Hall

Layer 1 of 3	**Description:** Brown rubbery material				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous particles, Rubber/Binder	None Detected	ND	**None Detected ND**	

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 3	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Wollastonite	5%	**Anthophyllite <1%**
		Talc fibers	2%	
Layer 3 of 3	**Description:** White brittle textured material with cream paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**

Lab ID: 20059482 **Client Sample #: 4BRCB-01-B**
Location: Orton Hall

Layer 1 of 3	**Description:** Brown rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Wollastonite	5%	**Anthophyllite <1%**
Layer 3 of 3	**Description:** Trace white brittle textured material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**

Lab ID: 20059483 **Client Sample #: 4BLCB-01-A**
Location: Orton Hall

Layer 1 of 4	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Rubber/Binder	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 4	**Description:** Off-white soft mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:		%	**Asbestos Type: %**
	Calcareous particles, Mastic/Binder	Wollastonite		3%	**None Detected ND**
Layer 3 of 4	**Description:** Brown brittle mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:		%	**Asbestos Type: %**
	Mastic/Binder	Wollastonite		5%	**Anthophyllite <1%**
		Talc fibers		2%	
Layer 4 of 4	**Description:** White brittle skim coat material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:		%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected		ND	**None Detected ND**

Lab ID: 20059484 **Client Sample #: 4BLCB-01-B**
Location: Orton Hall

Layer 1 of 3	**Description:** Black rubbery material				
	Non-Fibrous Materials:	Other Fibrous Materials:		%	**Asbestos Type: %**
	Calcareous particles, Rubber/Binder	None Detected		ND	**None Detected ND**
Layer 2 of 3	**Description:** Brown brittle/soft mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:		%	**Asbestos Type: %**
	Mastic/Binder	Wollastonite		6%	**None Detected ND**
Layer 3 of 3	**Description:** Off-white soft mastic with trace white compacted powdery material				
	Non-Fibrous Materials:	Other Fibrous Materials:		%	**Asbestos Type: %**
	Calcareous binder, Calcareous particles, Mastic/Binder	None Detected		ND	**None Detected ND**

Lab ID: 20059485 **Client Sample #: 4TCB-01-A**
Location: Orton Hall

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 3	**Description:** Tan rubbery material with trace thin off-white soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Mastic/Binder, Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Wollastonite	5%	**Anthophyllite <1%**
Layer 3 of 3	**Description:** White/off-white brittle textured material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Mineral grains	None Detected	ND	**None Detected ND**

Lab ID: 20059486 **Client Sample #: 4GRCB-01-A**
Location: Orton Hall

Layer 1 of 2	**Description:** Yellow brittle mastic with clear soft adhesive			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Adhesive/Binder, Fine particles, Mastic/Binder	Cellulose	<1%	**None Detected ND**
Layer 2 of 2	**Description:** White brittle textured material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**

Lab ID: 20059487 **Client Sample #: 4TCERT-01-A**
Location: Orton Hall

Layer 1 of 4	**Description:** Off-white ceramic tile with cream surface and trace white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Ceramic/Binder, Paint, Quartz	None Detected	ND	**None Detected ND**
Layer 2 of 4	**Description:** Light gray brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Cement/Binder, Fine particles	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 3 of 4	**Description:** White brittle textured material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Granules	None Detected	ND	**None Detected ND**
	Mineral grains			
Layer 4 of 4	**Description:** White brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Calcareous particles	None Detected	ND	**None Detected ND**

Lab ID: 20059488 **Client Sample #: WRCT-01-A**
Location: Orton Hall

Layer 1 of 1	**Description:** White powdery/micaceous material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Calcareous particles, Fine particles	None Detected	ND	**Chrysotile 5%**
	Vermiculite, Paint			

Lab ID: 20059489 **Client Sample #: WRCT-01-B**
Location: Orton Hall

Layer 1 of 1	**Description:** Off-white textured powdery material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**Chrysotile 12%**
	Perlite			**Anthophyllite <1%**

Lab ID: 20059490 **Client Sample #: WRCT-01-C**
Location: Orton Hall

Layer 1 of 1	**Description:** White powdery/micaceous material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Mica	Wollastonite	2%	**Chrysotile 3%**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Vermiculite, Paint

Lab ID: 20059491 **Client Sample #: WRCT-01-D**
Location: Orton Hall

Layer 1 of 1 **Description:** White powdery/micaceous material with white paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Mica	Wollastonite <1%	**Chrysotile 8%**
Vermiculite, Paint, Perlite		

Lab ID: 20059492 **Client Sample #: WRCT-01-E**
Location: Orton Hall

Layer 1 of 1 **Description:** White powdery/micaceous material with white paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Mica	None Detected ND	**Chrysotile 7%**
Vermiculite, Paint, Perlite		

Lab ID: 20059493 **Client Sample #: WRCT-01-F**
Location: Orton Hall

Layer 1 of 1 **Description:** White powdery/micaceous material with white paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Mica	None Detected ND	**Chrysotile 8%**
Vermiculite, Paint, Perlite		

Lab ID: 20059494 **Client Sample #: WRCT-01-G**
Location: Orton Hall

Layer 1 of 1 **Description:** White powdery/micaceous material with white paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Mica	None Detected ND	**Chrysotile 6%**

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: **Mr. Matt McKibbin**
Project Location: Orton Hall

Batch #: 2007995.00
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 28
Samples Analyzed: 28
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Vermiculite, Paint, Perlite

Sampled by: Client
Analyzed by: Alla Prysyazhnyuk **Date:** 05/12/2020
Reviewed by: Matt Macfarlane **Date:** 05/13/2020

Matt Macfarlane, Asbestos Lab Supervisor

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **2007995.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 5/12/2020 **Time** 4:00 PM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 6543-7358 **Project Location:** Orton Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 28 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	20059467	PLAS-01-A		A
2	20059468	PLAS-01-B		A
3	20059469	PLAS-01-C		A
4	20059470	PLAS-01-D		A
5	20059471	PLAS-01-E		A
6	20059472	PLAS-01-F		A
7	20059473	PLAS-01-G		A
8	20059474	WPPLAS-01-A		A
9	20059475	WPPLAS-01-B		A
10	20059476	WPPLAS-01-C		A
11	20059477	WPPLAS-01-D		A
12	20059478	WPPLAS-01-E		A
13	20059479	4GRECB-01-A		A
14	20059480	4GRECB-01-B		A
15	20059481	4BRCB-01-A		A
16	20059482	4BRCB-01-B		A
17	20059483	4BLCB-01-A		A
18	20059484	4BLCB-01-B		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	5/5/20	1600
Analyzed by	Alla Prysyazhnyuk		NVL	5/12/20	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 5/5/2020
Time: 4:07 PM
Entered By: Fatima Khan

ASBESTOS LABORATORY SERVICES

Company	Washington State University EH&S	**NVL Batch Number**	**2007995.00**
Address	PO Box 641172	**TAT**	5 Days **AH** No
	Pullman, WA 99164-1172	**Rush TAT**	
Project Manager	Mr. Matt McKibbin	**Due Date**	5/12/2020 **Time** 4:00 PM
Phone	(509) 335-3041	**Email**	mrmckibbin@wsu.edu
Direct	(509) 335-5311	**Fax**	(509) 730-5548

Project Name/Number: 6543-7358 **Project Location:** Orton Hall

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 28 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	20059485	4TCB-01-A		A
20	20059486	4GRCB-01-A		A
21	20059487	4TCERT-01-A		A
22	20059488	WRCT-01-A		A
23	20059489	WRCT-01-B		A
24	20059490	WRCT-01-C		A
25	20059491	WRCT-01-D		A
26	20059492	WRCT-01-E		A
27	20059493	WRCT-01-F		A
28	20059494	WRCT-01-G		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	5/5/20	1600
Analyzed by	Alla Prysyazhnyuk		NVL	5/12/20	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 5/5/2020
Time: 4:07 PM
Entered By: Fatima Khan

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ☐ 1 Hour
- ☐ 2 Hours
- ☐ 4 Hours
- ☐ 24 Hours
- ☐ 2 Days
- ☐ 3 Days
- ☐ 4 Days
- ☑ 5 Days
- ☐ 10 Days

Please call for TAT I

2007995

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 6543-7358
Project Location: ORTON HALL

- ☐ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ☐ PLM Gravimetry (600/R-93-116)
- ☐ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ☐ TEM (NIOSH 7402)
- ☐ EPA 400 Points (600/R-93-116)
- ☐ Asbestos in Vermiculite (EPA 600/R-04/004)
- ☐ TEM (AHERA)
- ☐ Other
- ☐ TEM (EPA Level II Modified)
- ☐ EPA 1000Points (600/R-93-116)
- ☐ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
☐ Call ( ) -
☐ Fax ( ) -
☐ Email: mrmckibbin@wsu.edu stephan.gilley@wsu.edu

Total Number of Samples 51

	Sample ID	Description	A/R
1		SEE ATTACHED SHEETS	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Stephan Gilley		WSU EH&S	4-30-2020	14:00
Relinquish by	Stephan Gilley		WSU EH&S	5-1-2020	13:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	[illegible]	[illegible]	[illegible]	5/15/2020	4pm fedex
Analyzed by					
Called by					
Faxed/Email by					

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
PLAS-01	White skim coat plaster/ gray scratch coat	Surf.	> 100,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: White skim coat Layer 2: Gray scratch coat Layer 3:	1215 adj	YES (NO)	
B	Layer 1: 〃 Layer 2: 〃 Layer 3: tan soft mastic	109	YES (NO)	
C	Layer 1: 〃 Layer 2: 〃 Layer 3:	165A	YES (NO)	
D	Layer 1: 〃 Layer 2: 〃 Layer 3: tan soft mastic L4: brown mastic	926	YES (NO)	
E	Layer 1: 〃 Layer 2: 〃 Layer 3:	812	YES (NO)	
F	Layer 1: 〃 Layer 2: 〃 Layer 3: tan soft mastic	@641	YES (NO)	
G	Layer 1: 〃 Layer 2: 〃 Layer 3: brown mastic	501 stairwell	YES (NO)	

Locations Dominant wall system

2007995

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
WPPLAS-01	Wall paper/fabric, adhesive, plaster system	Surf.	>100,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: brown burlap Layer 2: green adhesive/paper Layer 3: tan mastic skim coat scratch coat	900 @ elevator	YES (NO)	
B	Layer 1: white WP Layer 2: tan mastic Layer 3: skim coat scratch coat	1031	YES (NO)	
C	Layer 1: blue WP Layer 2: brown adh./paper Layer 3: brown mastic skim coat scratch coat	1226	YES (NO)	
D	Layer 1: white WP Layer 2: tan mastic Layer 3: skim coat scratch coat	609	YES (NO)	
E	Layer 1: white WP Layer 2: tan mastic Layer 3: skim coat scratch coat	224	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations lobby, student rooms, lounges

2007995

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
4GRECB-01	4" thick GREEN cove base / mastic	MISC.	> 50,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: 4-inch green cove base Layer 2: tan mastic Layer 3: brown mastic plaster	@ 1140	YES (NO)	
B	Layer 1: 4-inch green cove base Layer 2: tan mastic Layer 3: brown mastic	@ 641	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 2nd – 11th floor student hallways

2007995

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
4BRCB-01	4-inch BROWN cove base / mastic	misc	5,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: 4-inch BROWN cove base Layer 2: brown brittle mastic Layer 3:	12/5 adj	YES (NO)	
B	Layer 1: Layer 2: Layer 3:	8/2	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1st, 2nd 11th (central rooms), 12th floor. scattered

2007995

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
4BLCB-01	4-inch BLACK cove base/mastics	MISC.	7,500 sf

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: 4-inch BLACK cove base Layer 2: tan soft mastic Layer 3: brown brittle mastic	109	YES (NO)	
B	Layer 1: Layer 2: Layer 3:	926 @ door	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1st, 2nd – 11th floors: student rooms

2007995

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
4TCB-01	4 inch TAN cove base/ brn. brittle mastic/ plaster	misc.	500 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: 4 inch TAN cove base Layer 2: brown brittle mastic Layer 3: gray plaster	1226	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 12 ~~th~~ floor

2007995

WSU EH&S

Asbestos Sampling Data Sheet

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
4GRCB-01	4-inch GRAY cove base / tan-yellow sticky mastic	MISC.	500 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: 4-inch GRAY cove base Layer 2: Tan sticky mastic Layer 3:	1025 south end	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1st floor

2007995

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
4TCERT-01	4-inch TAN ceramic tile/ white caulk/ gray plaster, mortar	MISC	25,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: Tan ceramic tile Layer 2: white caulk Layer 3: gray plaster/mortar	123	YES (NO)	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 123, bathrooms throughout

2007995

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
WRCT-01	white thick rough pebble texture - ceiling	surf.	65,000 SF

Sample No.	Layering	Sample Location	Friable	Notes
A	Layer 1: white pebble text. ceiling Layer 2: Layer 3:	427	(YES) NO	honeycomb ceil - student rooms
B	Layer 1: Layer 2: Layer 3:	1226 lounge	(YES) NO	flat ceiling
C	Layer 1: Layer 2: Layer 3:	1142	(YES) NO	honeycomb
D	Layer 1: Layer 2: Layer 3:	819	(YES) NO	honeycomb
E	Layer 1: Layer 2: Layer 3:	718	(YES) NO	flat ceiling
F	Layer 1: Layer 2: Layer 3:	517	(YES) NO	honeycomb
G	Layer 1: Layer 2: Layer 3:	331	(YES) NO	honeycomb

Locations 1226, 2nd – 11th floors: student rooms - ceiling

2007995

May 7, 2020

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

NVL Batch # 2008000.00

RE: Total Metal Analysis
Method: EPA 7000B Lead by FAA <paint>
Item Code: FAA-02

Client Project: 6543-7358
Location: Orton Hall

Dear Mr. McKibbin,

NVL Labs received 6 sample(s) for the said project on 5/5/2020. Preparation of these samples was conducted following protocol outlined in EPA 3051/7000B , unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with EPA 7000B Lead by FAA <paint>. The results are usually expressed in mg/Kg and percentage (%). Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Shalini Patel, Lab Supervisor

Enc.: Sample results

LAB # 101861

Analysis Report

Total Lead (Pb)

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Orton Hall

Batch #: 2008000.00
Matrix: Paint
Method: EPA 3051/7000B
Client Project #: 6543-7358
Date Received: 5/5/2020
Samples Received: 6
Samples Analyzed: 6

Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent
20059530	PB-01	0.0551	180	< 180	< 0.018
20059531	PB-02	0.1364	73	< 73	< 0.0073
20059532	PB-03	0.2093	48	680	0.068
20059533	PB-04	0.2088	48	850	0.085
20059534	PB-05	0.0529	190	< 190	< 0.019
20059535	PB-06	0.2033	49	100	0.010

Sampled by: Client
Analyzed by: Ruth Schumaker
Reviewed by: Shalini Patel

Date Analyzed: 05/07/2020
Date Issued: 05/07/2020

Shalini Patel, Lab Supervisor

mg/ Kg =Milligrams per kilogram
Percent = Milligrams per kilogram / 10000
Note : Method QC results are acceptable unless stated otherwise.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

RL = Reporting Limit
'<' = Below the reporting Limit

Bench Run No: 2020-0507-1
FAA-02

LEAD LABORATORY SERVICES

Company	Washington State University EH&S	**NVL Batch Number**	**2008000.00**
Address	PO Box 641172	**TAT**	5 Days **AH** No
	Pullman, WA 99164-1172	**Rush TAT**	
Project Manager	Mr. Matt McKibbin	**Due Date**	5/12/2020 **Time** 4:00 PM
Phone	(509) 335-3041	**Email**	mrmckibbin@wsu.edu
Direct	(509) 335-5311	**Fax**	(509) 730-5548

Project Name/Number: 6543-7358 **Project Location:** Orton Hall

Subcategory Flame AA (FAA)

Item Code FAA-02 EPA 7000B Lead by FAA <paint>

Total Number of Samples 6 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	20059530	PB-01		A
2	20059531	PB-02		A
3	20059532	PB-03		A
4	20059533	PB-04		A
5	20059534	PB-05		A
6	20059535	PB-06		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	5/5/20	1600
Analyzed by	Ruth Schumaker		NVL	5/7/20	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 5/5/2020
Time: 4:23 PM
Entered By: Kelly AuVu

2008000

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

METALS CHAIN OF CUSTODY

Turn Around Time
- ☐ 2 Hour ☐ 4 Hours ☐ 24 Hours
- ☐ 2 Days ☐ 3 Days ☐ 4 Days
- ☑ 5 Days ☐ 6-10 Days
- Please call for TAT less than 24 Hours

Company: Washington State University EH&S
Address: P.O. Box 641172
Pullman, WA 99164
Phone: 509-335-3401

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 6543-7358
Project Location: ORTON HALL

- ☑ Total Metals ☐ TCLP
- ☑ FAA (ppm ☐ ICP (PPM ☐ GFAA (ppb) ☐ CVAA (ppb)
- ☐ Air Filter ☑ Paint Chips (%) ☐ Soil ☐ Paint Chips (cm) ☐ Dust Wipes ☐ Drinking Water ☐ Waste Water ☐ Other
- RCRA 8: ☐ Barium ☐ Chromium ☐ Silver ☐ Arsenic ☐ Mercury ☑ Lead ☐ Selenium ☐ Cadmium
- RCRA 11: ☐ Copper ☐ Zinc ☐ Other

Reporting Instructions: email
☐ Call ( ) - ☐ Fax ( ) - ☐ Email mrmckibbin@wsu.edu, stephan.gilley@wsu.edu

Total Number of Samples 6

	Sample ID	Description	A/R
1	PB-01	401s stairwell/white/metal/d. frame	
2	PB-02	755 stairwell/white/concrete/wall	
3	PB-03	111/white-cream/plaster/ceiling	
4	PB-04	127/tan/plaster/wall	
5	PB-05	exterior west/white-cream/concrete/wall	
6	PB-06	exterior east/white-cream/concrete/wall	
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Stephan Gilley		WSU EH&S	4-30-2020	14:30
Relinquish by	Stephan Gilley		WSU EH&S	5-1-2020	13:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Katmallon		NVLabs	5/5/2020	4pm fedex
Analyzed by					
Called by					
Faxed/Email by					

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 20-05-00360

Client: Washington State University - Pullman
P.O. BOX 641172
Pullman, WA 99164

Received Date: 05/05/2020
Analyzed Date: 05/05/2020
Reported Date: 05/06/2020

Project/Test Address: Orton Hall; Pullman, WA

Client Number:
49-3308

Fax Number:
509-335-4442

Laboratory Results

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
20-05-00360-001	PC-01-F		White Granular; Homogeneous	NAD	100% Non-Fibrous
20-05-00360-002	WRCT-01-H		White Granular; Homogeneous	3% Chrysotile	97% Non-Fibrous
			Total Asbestos:	3%	

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 20-05-00360

Project/Test Address: Orton Hall; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials

QC Sample: 39-M12015-1

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Christian H. Schaible

Reviewed By Authorized Signatory: Melissa Kanode

Missy Kanode
QA/QC Clerk

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0 VELAP 460172. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND: NAD = no asbestos detected

EHS Laboratories™

Asbestos Chain-of-Custody

20-05-00360

Due Date:
05/08/2020
(Friday)
AE
CMS 2PLM

Environmental Hazards Services, LLC

www.leadlab.com
(800)347-4010
(804)275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

Company Name: Washington State University EH&S Address: P.O. Box 641172 City/State/Zip: Pullman, WA 99164

Phone: (509) 335-5604 Fax: ( ) E-mail: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu Acct. Number:

Project Name / Testing Address: ORTON HALL City/State (Required): Pullman, WA

Collected by: Stephan Gilley Purchase Order Number: 6543-7358

Turn Around Times : *If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.*

_____ 1 - Day _____ 2 - Day ✓ 3 - Day _____ Same Day (Must Call Ahead) _____ Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS							AIR					COMMENTS
			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	PC-01-F	4-30-2020	✓												
2	WRCT-01-H	4-30-2020	✓												
3															
4															
5															
6															
7															
8															
9															
10															

Released by: Stephan Gilley Signature: Date/Time: 5-1-2020 14:30

Received by: Edlabmgr Signature: Date/Time: 5/5/20 1:18pm

WSU EH&S

Asbestos Sampling Data Sheet

0326

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
PC-01	Thin paint on concrete ceiling - honeycomb	Surf.	2,500 sf

Sample No.	Layering	Sample Location	Friable	Notes
F	Layer 1: white - tan paint texture Layer 2: Layer 3:	125	YES (NO)	honey comb ceil.
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 119, 121S, 121N, 125, 127

recd EB 5/5/20 1:18pm

0340

WSU EH&S **Asbestos Sampling Data Sheet**

Building: 6543-7358 ORTON HALL Inspector S. GILLEY Date APRIL/MAY 2020

HSA	Material	Type (TSI, Surfacing, Misc.)	Estimated Quantity
WRCT-01	white thick rough pebble texture - ceil.	surf.	65,000 sf

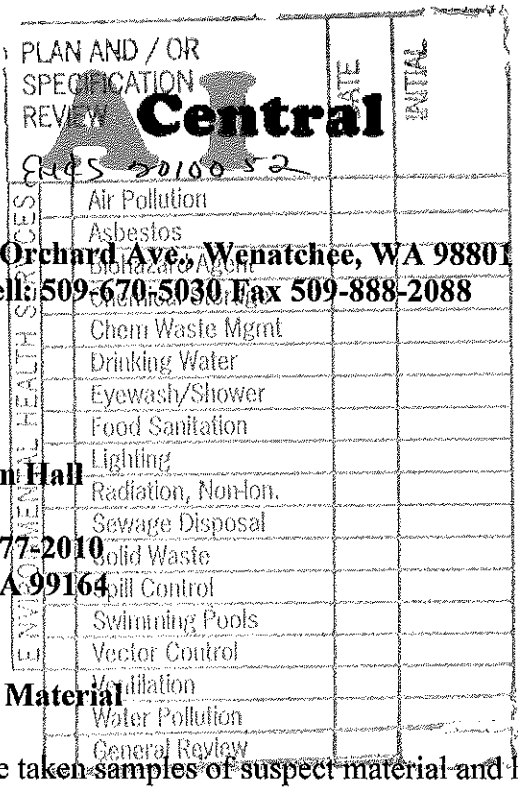
Sample No.	Layering	Sample Location	Friable	Notes
H	Layer 1: white pebble texture ceiling Layer 2: Layer 3:	331	(YES) NO	honeycomb ceiling
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	
	Layer 1: Layer 2: Layer 3:		YES NO	

Locations 1226, 2nd - 11th floors: student rooms - ceiling

recd 5/5/20 11:18am

APPENDIX E

Previous Roof Sampling and Abatement Letter



1630 Orchard Ave., Wenatchee, WA 98801
Cell: 509-670-5030 Fax 509-888-2088

Environmental Health & Safety
FEB 23 2010
RECEIVED

February 8, 2010

Customer: **WSU / Orton Hall**

Location: **Project # 5077-2010**
Pullman, WA 99164

Subject Material: **Roof Material**

Findings: I have taken samples of suspect material and have found there to **BE ACM (Asbestos Containing Materials)** in the following locations:

OR-1-10-00104-0001

Roof (Layers 3-7) – (Chrysotile Asbestos 10%) returned greater than allowable and needs to be addressed properly before removal or replacement of existing roof can take place.

OR-2-10-00104-0002

Roof (Layers 3-7) – (Chrysotile Asbestos 10%) returned greater than allowable and needs to be addressed properly before removal or replacement of existing roof can take place.

OR-4-10-00104-0004

Roof (Layers 3-7) – (Chrysotile Asbestos 10%) returned greater than allowable and needs to be addressed properly before removal or replacement of existing roof can take place.

Applicable Rules: **Chapter 296-62 WAC**
Chapter 296-65 WAC
Chapter 296-155 WAC

All other samples have returned clear. If there are any questions about this report feel free to contact me any time.

We are a certified asbestos abatement contractor and would be more than happy to give you an estimate for removal.

MEYER BROTHERS

ROOFING & SHEET METAL

January 3, 2011

Washington State University
110 Commons
Pullman, WA 99164

RE: Washington State University – Orton Hall Contract No. 18895

Subject: Asbestos Materials

Dear Doug,

Meyer Brothers Roofing, Inc. did not use any materials containing asbestos in this project.

We do not use materials containing asbestos in any of our projects.

Regards,

Eugene Meyer
President

mbr@meyerbrothersroofing.com • 2301 Lincoln Ave, Tacoma, WA 98421
PHONE 253-596-5005 FAX 253-596-5011 • STATE CONTRACTORS REG. NO. MEYERBR142LL

APPENDIX F

Laboratory Accreditations and Certificates

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101882-0

Environmental Hazards Services, L.L.C.

N. Chesterfield, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2020-01-01 through 2020-12-31

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Environmental Hazards Services, L.L.C.
7469 Whitepine Road
N. Chesterfield, VA 23237-2261
Ms. Julie Dickerson
Phone: 804-275-4788 Fax: 804-275-4907
Email: jdickerson@leadlab.com
http://www.leadlab.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101882-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Effective 2020-01-01 through 2020-12-31

March 29, 2019

Laboratory ID: 101861

Nghiep Vi Ly
NVL Laboratories, Inc.
4708 Aurora Avenue N.
Seattle, WA 98103

Dear Mr./Ms. Ly:

Congratulations! The AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC's Analytical Accreditation Board (AAB) has approved NVL Laboratories, Inc. as an accredited Industrial Hygiene, Environmental Lead, Environmental Microbiology and Unique Scope laboratory.

Accreditation documentation includes the IHLAP, ELLAP, EMLAP and Unique Scopes accreditation certificate, scope of accreditation document and a copy of the current AIHA-LAP, LLC license agreement (if your completed agreement is not on file at AIHA-LAP, LLC). The accreditation symbol has been designed for use by all AIHA-LAP, LLC accredited laboratories. If your laboratory chooses to use the symbol in its advertising the laboratory's accreditation, you must complete and return the AIHA-LAP, LLC license agreement to a Laboratory Accreditation Specialist. Once submitted, an electronic copy of the accreditation symbol will be sent to you.

Laboratory accreditation shall be maintained by continued compliance with IHLAP, ELLAP, EMLAP and Unique Scopes requirements *(see Policy Modules 2B, 2C, 2D, 2E, and 6),* which includes proficient participation in AIHA-LAP, LLC approved proficiency testing, demonstration of competency, or round robin program as indicated on the AIHA-LAP "Approved PT and Round Robin" webpage, its associated Scope/PT table, and as required in Policy Module 6, for all Fields of Testing (FoTs) for which the laboratory is accredited. An accredited laboratory that wishes to expand into a new FoT must submit an updated accreditation application to AIHA-LAP, LLC for review by the AAB.

Any changes in ownership, laboratory location, personnel, FoTs/Methods, or significant procedural changes shall be reported to AIHA-LAP, LLC in writing within twenty (20) business days of the change.

The accreditation certificate is the property of AIHA-LAP, LLC and must be returned to us should your laboratory withdraw or be removed from the IHLAP, ELLAP, EMLAP and Unique Scopes.

Again, congratulations. If you have any questions, please contact Lauren Schnack, Laboratory Accreditation Specialist, at (703) 846-0716.

Sincerely,

Cheryl O. Morton

Cheryl O. Morton
Managing Director

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

NVL Laboratories, Inc.

4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: 101861

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: June 01, 2021
✓	**ENVIRONMENTAL LEAD**	Accreditation Expires: June 01, 2021
✓	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: June 01, 2021
☐	**FOOD**	Accreditation Expires:
✓	**UNIQUE SCOPES**	Accreditation Expires: June 01, 2021

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Beth Bair

Elizabeth Bair
Chairperson, Analytical Accreditation Board

Cheryl O. Morton

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 17 – 09/11/2018

Date Issued: 03/29/2019

AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

NVL Laboratories, Inc.
4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: **101861**
Issue Date: 03/29/2019

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 04/01/1997

IHLAP Scope Category	**Field of Testing (FoT)** (FoTs cover all relevant IH matrices)	**Technology sub-type/ Detector**	**Published Reference Method/Title of In-house Method**	**Method Description or Analyte** *(for internal methods only)*
Spectrometry Core	Atomic Absorption	FAA	NIOSH 7082	
	Inductively-Coupled Plasma	ICP/AES	NIOSH 7300	
	X-ray Diffraction (XRD)		NIOSH 7500	
Asbestos/Fiber Microscopy Core	Phase Contrast Microscopy (PCM)		NIOSH 7400	
Miscellaneous Core	Gravimetric		NIOSH 0500	
			NIOSH 0600	

A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

AIHA Laboratory Accreditation Programs, LLC
SCOPE OF ACCREDITATION

NVL Laboratories, Inc.
4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: **101861**
Issue Date: 03/29/2019

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air and composited wipes analyses are not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 02/07/1997

Field of Testing (FoT)	Technology sub-type/ Detector	Method	Method Description (*for internal methods only*)
Paint		EPA SW-846 3051	
		EPA SW-846 7000B	
Soil		EPA SW-846 3051	
		EPA SW-846 7000B	
Settled Dust by Wipe		EPA SW-846 3051	
		EPA SW-846 7000B	
Airborne Dust		NIOSH 7082	

A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

AIHA Laboratory Accreditation Programs, LLC
SCOPE OF ACCREDITATION

NVL Laboratories, Inc.
4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: **101861**
Issue Date: 03/29/2019

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Environmental Microbiology Laboratory Accreditation Program (EMLAP)

Initial Accreditation Date: 02/01/1997

EMLAP Category	Field of Testing (FoT)	Method	Method Description *(for internal methods only)*
Fungal	Air - Direct Examination	SOP 12.133	In-House: Analysis of Spore Trap
	Bulk - Direct Examination	SOP 12.133	In-House: Bulk Analysis
	Surface - Direct Examination	SOP 12.133	In-House: Analysis of Surface Wipe

A complete listing of currently accredited Environmental Microbiology laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

AIHA Laboratory Accreditation Programs, LLC
SCOPE OF ACCREDITATION

NVL Laboratories, Inc.
4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: **101861**
Issue Date: 03/29/2019

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Unique Scopes Laboratory Accreditation Program (Unique Scopes)

Initial Accreditation Date: 04/01/2013

Unique Scope Category	Field of Testing (FoT)	Method	Method Description (*for internal methods only*)
Consumer Product Testing	Lead in Paint and Other Similar Surface Coatings	CPSC-CH.E1003-10	
	Total Lead in Metal Children's Product	CPSC-CH.E1001-08	
	Total Lead in Non-Metal Children's Products	CPSC-CH.E1002-08	

A complete listing of currently accredited Unique Scope laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 102063-0

NVL Laboratories, Inc.

Seattle, WA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-10-01 through 2020-09-30

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NVL Laboratories, Inc.
4708 Aurora Avenue N.
Seattle, WA 98103
Mr. Nghiep Vi Ly
Phone: 206-547-0100 Fax: 206-634-1936
Email: nick.l@nvllabs.com
http://www.nvllabs.com

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 102063-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Effective 2019-10-01 through 2020-09-30

APPENDIX G

Building Inspector Training Certificates

KYRON

Certificate of Completion

Stephan Gilley

has successfully completed

4-Hr AHERA Certified Building Inspector Refresher Training

Online instructor-led course

In compliance with TSCA Title II AHERA 40 CFR Part 763

as approved by the State of Missouri

Kyron Environmental Accreditation #MO-129

Date of Training & Exam: April 30, 2020 online instructor-led

Certificate # BIR20200430-08

Expires: 04/30/2021

Larry Hagel, Instructor

10 N Post Street, Suite 218 | Spokane, Washington 99201 | PHONE 509.252.8880 | FAX 509.252.8877 | WEB kyronehs.com