

NARRATIVE REPORT

1.0 BUILDING INFORMATION

Robinson Hall was originally constructed in 1976; there was a 2001 renovation throughout the building.

Robinson Hall is a one-story, 10,402 ft² building which primarily serves as office areas and work areas for veterinary personnel.

The interior floor finishes included concrete, floor tile, and epoxy flooring; the interior wall finishes included gypsum wallboard and concrete block; and the interior ceiling finishes included ceiling tile, gypsum wallboard, and concrete. The roofing system is a combination of a peaked asphalt shingle roof over the north section of the building and a flat rubber membrane roof over the south section of the building and the exterior of the structure is brick.

The piping systems were insulated; fiberglass insulation (both with and without hard fittings) is located in the building. Steam and domestic water enter the building via a tunnel into room 115. HVAC systems located in the building consisted of steam radiators and forced air furnaces with heating/cooling coils.

2.0 ASBESTOS SURVEY INFORMATION

Robinson Hall building was surveyed as part of a larger project on NDSU's Fargo, ND Campus. This report is part of "Volume 8" of a nine volume series. This report includes building specific information only; please refer to the opening section of "Volume 8" for methodologies, definitions, and other pertinent supporting information.

A total of 37 samples were collected from suspect asbestos-containing materials (ACM) from Robinson Hall on June 28, 2007, an additional 18 samples were collected on December 12, 2007, and an additional 2 samples were collected on December 27, 2007. Laboratory analysis results indicate **23 of these samples tested positive for asbestos.**

2.1 Suspect Materials Identified and Sampled

Gypsum Wallboard (3 types)	Joint Compound (2 types)
Floor Tile (2 types)	Floor Tile Mastic (2 types)
Door Caulk	Sink Undercoating (4 types)
Ceiling Tile (4 types)	Black Lab Countertop (2 types)
Baseboard Adhesive (2 types)	Exterior Window Caulk
Exterior Building Seam Caulk	Encapsulant on Fiberglass Insulation
Firestop	Asphalt Shingle
Roof Tarpaper	Roof Flashing (old roof)
Roofing Felts (old roof)	Roof Tarpaper (old roof)
Sink/Counter System Undercoating (2 types)	Counter Undercoating
Unknown Pipe Insulation	Tank Insulation
Hard Pack Encapsulant on Fiberglass Insulation	Window Glazing on Door (5 types)
Window Glazing (2 types)	

The Asbestos Bulk Sample Results Table includes asbestos sampling data.

2.2 Asbestos Containing Materials

Joint Compound (2 types)
12" Beige/White Floor Tile and Mastic
Black Sink Undercoating (1 type)
White Sink Undercoating (1 type)
Black Sink/Counter System Undercoating (2 types)
Black Counter Undercoating
Black Lab Countertop (1 type)
Window Glazing on Door (5 types)
Window Glazing (2 types)

The ACM Locations/ Friable Materials Assessments Table includes ACM locations data.

2.3 Cost Estimates

Legend Technical Services Inc. estimates abatement costs (removal & disposal) of ACM for Robinson Hall as follows:

ACM	QUANTITY	UNIT COST	TOTAL COST
Asbestos Joint Compound	7,660 ft ²	\$5.00/ ft ²	\$38,300.00
Asbestos Floor Tile and Mastic	3,176 ft ²	\$4.00/ ft ²	\$12,704.00
Asbestos Undercoating (all types)	5 ea	\$150.00/ ea	\$750.00
Asbestos Black Lab Countertop	1 ea	\$350.00/ ea	\$350.00
Asbestos Window Glazing (all types)	62 ea	\$225.00/ ea	\$13,950.00
Total Estimated Abatement Costs:			\$66,054.00

2.4 Survey Notes

As part of the 2001 addition/renovations, a new peaked asphalt shingled roof was added over the north section of the building. The old flat rubber membrane roof remains in the attic spaces that were created above the building during the addition of the peaked asphalt shingled roof. LEGEND sampled the old flat rubber membrane roof system and the new peaked asphalt shingled roof system.

LEGEND TECHNICAL SERVICES, INC.
ACM LOCATIONS/FRIABLE MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)
ROBINSON HALL (BUILDING A085)

ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. ¹	NOTES
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Room 101

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	110 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	420 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.

Room 102

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	780 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	1,220 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.
Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The door is in the northwest corner of the room.

Room 102A

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	132 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos; they are under the 12" Gray with dark gray and white floor tile.
Joint Compound	3% Chrysotile	480 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.
White Sink Undercoating	10% Chrysotile	1 sink	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The sink is along the north wall.
Black Counter Undercoating	10% Chrysotile	1 counter	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The counter is along the south wall.

* = Non-Friable materials were not assessed

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Room 102A1

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	132 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos; they are under the 12" Gray with dark gray and white floor tile.
Joint Compound	3% Chrysotile	480 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.

Room 103

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	110 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	420 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.

Room 104

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	120 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos; they are under the 12" Gray with dark gray and white floor tile.
Joint Compound	3% Chrysotile	440 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.
Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The door is on the north end of the room.

Room 105

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	88 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
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* = Non-Friable materials were not assessed

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LEGEND No. 0700048 (NDSU)
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ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. ¹	NOTES
Joint Compound	3% Chrysotile	88 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on the ceiling in this room.

Room 106

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	726 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	1,100 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.
Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The door is in the northeast corner of the room.

Room 107

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	110 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	110 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on the south wall in this room.

Room 108

Joint Compound	3% Chrysotile	88 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on the ceiling in this room.
Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The door is in the northeast corner of the room.

* = Non-Friable materials were not assessed

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ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. ¹	NOTES
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Room 108A

Joint Compound	3% Chrysotile	187 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on the ceiling in this room.
Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The door is in the northeast corner of the room.
Window Glazing	2% Chrysotile	3 windows	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The three windows are on the east wall.

Room 108B

Joint Compound	3% Chrysotile	99 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on the ceiling in this room.
Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The door is in the northeast corner of the room.
Black Sink/Counter System Undercoating	10% Chrysotile	1 sink/ counter system	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The counter/sink system is along the north wall.

Room 109

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	88 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	88 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on the ceiling in this room.

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ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. ¹	NOTES
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Room 111 Abated Feb 2013

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	110 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	420 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.
Black Counter Undercoating	10% Chrysotile	1 counter	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The counter is in the northwest corner.
Black Lab Countertop	10% Chrysotile	1 countertop	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The countertop is along the east wall.

Room 113

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	150 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Joint Compound	3% Chrysotile	500 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is on all the walls in this room.

Room 117 Now Room 124

Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the west end of the room and one on the east end of the room.
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Room 122 Now Room 132A

Window Glazing on Door	3% Chrysotile	4 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There are two doors on the west end of the room and two on the wall dividing the room the room.
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Room 123 Now Room 134A								
Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room and one on the wall dividing the room.
Room 125 Now Room 136A								
Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room and one on the wall dividing the room.
Room 126 Now Room 138A								
Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the west end of the room and one on wall dividing the room.
Room 127 Now Room 140A								
Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room and one on the wall dividing the room.
Room 132 Now Room 146								
Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room.
Black Sink/Counter Undercoating	10% Chrysotile	1 sink/ counter system	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The counter/sink system is along the north wall.
Room 133 Now Rooms 148 and 148A								
Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room and one on the west end of the room.

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Room 135 Now Room 152

Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room.
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Room 137 Now Room 154A

Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room and one on the wall dividing the room.
Window Glazing	3% Chrysotile	1 window	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window is on the west wall.

Room 138 Now Room 156A

Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the west end of the room and one on the wall dividing the room.
Window Glazing	3% Chrysotile	1 window	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window is on the east wall.

Room 141 Now Room 158A

Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the east end of the room and one on the wall dividing the room.
Window Glazing	3% Chrysotile	1 window	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window is on the west wall.

Room 142 Now Room 160A

Window Glazing on Door	3% Chrysotile	2 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the west end of the room and one on the wall dividing the room.
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Window Glazing	3% Chrysotile	1 window	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window is on the east wall.
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Room 143

Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door in the southwest corner of the room.
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Room 144 Now Room 168

Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the south end of the room.
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Room 145 Now Room 164

Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the south end of the room.
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Room 146 Now Room 166

Window Glazing on Door	3% Chrysotile	1 door	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one door on the south end of the room.
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Hallway 188 (north and south sections of the hallway, the east and west main entrys, and the small vestibule in the hallway by rooms 109/111)

12" Beige/White Floor Tile and Mastic	3-10% Chrysotile	520 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic is throughout the south section of the hallway, the east and west main entrys, and the vestibule by rooms 109/111
Joint Compound	3% Chrysotile	1,520 ft ²	Non-Friable Surfacing	N/A*	N/A*		N/A*	The joint compound is throughout the south section of the hallway, the east and west main entrys, and the vestibule by rooms 109/111.

* = Non-Friable materials were not assessed

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Window Glazing on Door	3% Chrysotile	7 doors	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There are 2 doors in each the east and west main entries, 2 in the vestibule by rooms 109/111, and 1 in the northwest entry (by room 144).
Window Glazing	3% Chrysotile	12 windows	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There are six windows in each the east and west main entries.

now
168

¹Assessment Categories:

- | | |
|---|---|
| 1) Damaged or Significantly Damaged TSI ACM | 5) ACM with Potential for Damage |
| 2) Damaged Friable Surfacing ACM | 6) ACM with Potential for Significant Damage |
| 3) Significantly Damaged Friable Surfacing ACM | 7) Any Remaining Friable ACM or Friable Suspected ACM |
| 4) Damaged or Significantly Damaged Friable Miscellaneous ACM | |

End

* = Non-Friable materials were not assessed