Environmental Testing & Consulting, Inc.

Asbestos Inspection and Hazardous Materials Assessment

Prepared for:

Michigan State University
Office of Environmental and Occupational Safety
East Lansing, MI 48202

ASBESTOS INSPECTION AND HAZARDOUS MATERIALS ASSESSMENT
OF BUILDING 2-BERKEY HALL
LOCATED ON THE
MICHIGAN STATE UNIVERSITY CAMPUS
EAST LANSING, MI.

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1.0) INTRODUCTION

Airborne asbestos contamination in buildings is a significant environmental problem. It has been determined and documented that inhalation of significant quantities of airborne asbestos fibers over an extended period of time can have serious health affects. In order to assess any potential health risks within a building, it is necessary to conduct a survey of the building to identify and locate any friable or non-friable asbestos-containing materials (ACM) that may be located within it.

If and when ACM are located within a building, the ACM must then be evaluated and assessed to determine whether any immediate health hazards are presented to the building occupants. It must be noted that the presence of asbestos in a building does not necessarily mean that the health of the building occupants is endangered. As long as an ACM remains intact (in good condition and is not disturbed, damaged, or mutilated) exposure of asbestos fibers to the air is unlikely.

Michigan State University (MSU) contracted Environmental Testing & Consulting, Inc. (ETC) to perform a survey of **Building 2-Berkey Hall**. This survey was to include sampling all friable and non-friable materials from both the interior and exterior of the building. ETC's industrial hygienist(s), Michael T. Charest conducted the survey which occurred from December 15, 2014 through January 15, 2015, 2014. The industrial hygienists identified areas where materials suspected of containing asbestos were located. Wherever such materials were found, data was collected regarding area quantities, conditions, potential hazard concerns and deterioration factors. As necessary, samples of each type of material were taken in different locations to determine actual asbestos content.

All samples collected in this survey were analyzed for asbestos content. The analysis followed the Environmental Protection Agency's (EPA) recommended method of Polarized Light Microscopy (PLM), and the EPA-PLM protocol for the determination of asbestos fibers in bulk insulation materials.

2.0 REGULATORY REQUIREMENTS

The Environmental Protection Agency (EPA) set the standard for asbestos surveys in the AHERA regulations (40 CFR Part 763) which required surveys of all school buildings in the United States. These regulations were specific regarding survey techniques, number of samples required and certification of inspectors. These same regulations were modified and increased when AHERA was reauthorized under ASHARA. The ASHARA reauthorization also expanded the AHERA requirements to certify inspectors performing surveys in all public and commercial buildings.

In addition to the EPA regulations, the Department of Occupational Safety and Health (OSHA) has also passed regulations affecting the performance of asbestos surveys in buildings. According to current OSHA regulations (29 CFR 1926.1101), building owners must inform occupants of the location, quantity and condition of confirmed or assumed asbestos containing materials within all public and commercial facilities.

In addition to these regulations regarding surveys, facility owners and operators are also required to insure that employees or occupants of their buildings are not exposed to unsafe levels of airborne asbestos. Allowable fiber levels as defined by the regulatory agencies and standards below dictate which levels are applicable in which facilities:

0.01 f/cc - Environmental Protection Agency (EPA) Clean Air Standard

This standard was designed as a clearance criterion for asbestos removal projects in schools. This means that if a removal project occurs in a school, air testing must be conducted in the removal area after work is completed. The results of this sampling must be below this level in order to allow reoccupancy of this area.

0.05 f/cc - Michigan Occupational Safety and Health Administration (MIOSHA) Clean Air Standard

This standard is similar to the EPA standard previously mentioned except that it applies to all other public buildings and areas within the State of Michigan

0.10 f/cc - Occupational Safety and Health Administration (OSHA) Personal Exposure Level

This is the OSHA permissible exposure limit (PEL) average over an 8 hour day. This means that this is the maximum level of asbestos that workers and/or employees can be exposed to without respirator protection and protective clothing. Should air sampling be at or near the PEL the employer will have to:

- Implement Worker Training
- Employee Respiration Monitoring
- Recordkeeping
- Medical Surveillance
- Notify Workers
- Post Danger Signs
- Perform periodic air monitoring, establish regulated areas, and construct decontamination facilities
- Provide respiratory protection and personnel protective clothing

For these reasons, it is important that building owners conduct a combination of a complete asbestos bulk survey and periodic air monitoring to determine what types of asbestos containing materials (ACM) are present in their building, what condition these materials are in and to what extent these materials have become airborne.

Although only schools are federally mandated to conduct asbestos surveys of their buildings, most private industry and governmental institutions are having asbestos surveys conducted to limit their liability with regards to ACM and to comply with the OSHA requirements. Building owners are also arranging for periodic air monitoring to be conducted in areas of the building where ACM exists and can not be immediately removed. These air results can be compared to current regulations as shown above to determine if the airborne concentrations are excessive.

3.0) HEALTH ASPECTS OF ASBESTOS

Asbestos is a generic term encompassing various fibrous mineral silicates, including chrysotile (hydrated magnesium silicate), Amosite (iron magnesium silicate), Crocidolite (sodium-iron silicate), Tremolite (calcium-magnesium silicate), Anthophyllite (another iron-magnesium silicate), and Actinolite (calcium-magnesium-iron silicate).

The potential health hazards associated with exposure to asbestos results from inhalation of airborne fibers; small asbestos fibers can pass readily through the upper respiratory tract and be deposited in the terminal bronchioles of the lung. There they can produce a local irritation which the body attempts to neutralize by initiating a tissue response. The resulting body response is encapsulation of the fibers and consequent formation of "asbestos nodules." Asbestos fibers are the causative agents in cases of asbestosis.

In its most severe form asbestosis can contribute to, and result in, death due to the inability of the body to obtain oxygen because of the heart's ability to pump blood through scarred lungs. Exposure to airborne asbestos fibers has also been associated with bronchogenic carcinoma (a malignancy of the interior of the lung), mesothelioma (a diffuse malignancy of the lining of the chest cavity or abdomen), and cancer of the stomach, colon, and rectum. Cigarette smoking can enhance the incidence of bronchogenic carcinoma.

A NIOSH/OSHA committee concluded that "evaluation of all available human data provides no evidence for a threshold or for a safe level of asbestos exposure." The committee goes on to recommend "that, to the extent uses of asbestos cannot be eliminated or less toxic materials substituted for asbestos worker exposure to asbestos must be controlled to the maximum extent possible."

In order to protect workers from such occupational hazards, OSHA has established a permissible exposure limit of 0.1 fibers (longer than 5 micrometers) per cubic centimeter of air (f/cc) with an 8-hour, time-weighted average (TWA) concentration limit. NIOSH also recommended an 8-hour TWA exposure limit of 0.1 f/cc.

4.0) COLLECTION OF DATA AND SURVEY OF FACILITY

All sample collection, analysis, and interpretation was completed in accordance with all federal, state, and local regulations affecting these procedures. AHERA procedures and protocols were followed during the survey of this facility. The sampling and analytical techniques used during the survey are described below:

4.1) SAMPLING PROTOCOL

The buildings and areas included within this contract were accessed and visually inspected for the presence of any ACM. This inspection included all accessible electrical, mechanical and fireproofing systems and the materials thereof.

4.2) SITE INSPECTION

ETC's industrial hygienist, Michael T. Charest inspected **Building 2-Berkey Hall** for ACM's. The site inspection involved three steps: (1) reviewing available information, (2) arranging physical access, and (3) conducting the actual inspection.

Inspection of available information – i.e. blueprints, building specifications, previous asbestos surveys, or floor plans to determine known or likely locations of asbestos. Copies of the floor plans were made in order to mark the sample locations of suspected ACM's. A complete floor plan and diagram is vital prior to beginning a survey to insure that all areas are properly accessed.

If all rooms or spaces were not numbered or identified, ETC's on-site personnel may have assigned numbers to all the spaces within the facility. This is necessary to insure that all areas can be properly identified. *For this reason, all future references to sample locations or location of asbestos materials should be referenced against the maps included within this report. It is likely that the numbers assigned by ETC staff may not correlate with the numbering system (or common names) used within the building at the time of the survey.*

Arrangements for physical access. As necessary, arrangements were made to obtain keys, ladders, and access sites. If possible, time periods of low activity were selected to minimize interference with building users.

Initial inspection. The building was inspected according to a predetermined search scheme and a list of potential sampling sites was prepared. Along with this, pertinent data such as material condition, location, friability, quantity and factors used to determine exposure were gathered. Assessments of all friable and non-friable ACM were made.

Follow-up inspection. ETC then contacted MSU staff and identified areas where destructive access was required to review materials that were not readily accessible. At the follow-up inspection, ETC reviewed these previously inaccessible areas. Additionally, ETC quantified and assessed the condition of materials deemed to be positive for asbestos content during the initial survey.

4.3 SAMPLE SITE SELECTION

Potential sampling sites were selected by their ability to characterize the building's asbestos content and by their estimated exposure potential. Large surfaces with high exposure potential were frequently sampled more than once. This was done to allow for the possibility that the surface, appearing homogeneous, is in fact composed of more than one construction material. A minimum of three samples were taken of each suspect material as required by both the EPA and OSHA regulations. Additionally, for surfacing materials (spray or trowel applied) the simplified sampling scheme described in AHERA was followed.

4.4) SEARCH PATTERN

In an effort to determine a pattern, several steps were taken. The ETC industrial hygienists relied on their own judgment as to whether more than one pipe or duct system supplied the building. When there was more than one system, the boundaries of those systems were inspected for changes in construction material.

In each room that is addressed, hidden locations were surveyed where possible. These included such locations as above suspended ceilings, crawlspaces, attics and basements.

4.5 SAMPLE ACQUISITION

All samples were taken according to the following methodologies:

1. First wetting the surface of the material to prevent the release of fibers during the sampling procedure.

2. Extracting the sample with a corer or other appropriate tool, being careful to collect a representative sample of all layers encountered.

3. Placing the sample in a sealed impermeable container.

4. Labeling the sample container with appropriate information and logging the information into a field notebook.

5. Sealing the surface of the sampled area with duct tape or other appropriate means to prevent the release of fibers as a result of sampling techniques.

6. Delivering the sealed sample to the laboratory for analysis.

In addition to taking samples of the friable materials encountered during the survey, ETC's hygienist also assessed the overall condition, friability, accessibility, types of damage, and factors affecting potential fiber release of each material.

5.0 ANALYSIS PROTOCOL

The samples taken during this survey were analyzed at Environmental Testing Laboratories (ETL). This laboratory is located in Mt. Laurel, NJ. All bulk samples were analyzed using Polarized Light Microscopy (PLM). This is the method of choice which was recognized by the Environmental Protection Agency (EPA). PLM serves several functions. Its main purpose is to identify fibrous asbestos in bulk samples. The PLM method is also used to distinguish between the various types of asbestos within the sample.

When a bulk asbestos sample is received, several representative portions of the sample are removed and put into a labeled petri dish. The sample parts are extracted using forceps. These extracted fibers are then placed on a microscopy slide and mounted using a liquid of similar refractive indices.

In accordance with AHERA guidelines, if a sample was comprised of more than one layer of distinct material, each of the materials were separated out and analyzed individually. For this reason, the total number of samples analyzed may exceed the number listed as having been taken.

After mounting, the fibers are identified using Polarized Light Microscopy (PLM), supplemented by dispersion staining. After fiber identification by PLM an estimation is made as to the percent composition of asbestos. The estimated percentages are based on size, number, shape, density of each of the components, and on comparison to a standard set of samples previously quantitated by the interim Research Triangle Institute (RTI) method.

ETL Laboratories participates in several quality assurance programs, including the EPA Bulk Sample Rounds. Bulk samples are sent to participating laboratories quarterly, for microscopic identification of asbestos content. The results of this Quality Assurance program are available for public review.

ETL Laboratories also participates in the NIOSH-PAT Program for Asbestos Air Analysis. These samples are sent to participating laboratories quarterly as well. The samples are analyzed using Phase Contrast Microscopy and compared to results from other laboratories. All laboratories receive a "Proficient" or "Non-Proficient" rating, and the results are available for public review.

6.0 SURVEY LIMITATIONS AND PROBLEMS

Throughout the course of any asbestos survey, there are a number of problems and limitations that affect the quality of the final report. These limitations may be caused by access concerns, materials with conflicting analytical results, materials that can not be sampled, materials that can not be quantified and/or materials that were not surveyed due to recent renovations or instruction from the client.

6.1 INACCESSIBLE AREAS

There are certain spaces within a building that can not be accessed during the course of a normal survey without demolition activities. Those areas would include, but are not limited to:

- Pipe and pipe joint insulation and other potential ACBM behind and within walls; above and within plaster ceilings; below and within floors - that do not have access either through doors or by the raising of ceiling panels.
- Tunnels which are enclosed, very small or unsafe.
- Boiler Breaching and ducts that are enclosed with steel or other materials without access doors or panels.
- Inaccessible interior boiler insulation or gasket material and stack material.
- Floor tile located underneath carpeting, other floor tile or other materials that can not be destroyed or damaged.
- Materials located at a height not accessible by ladders or other means.
- Areas that can not be accessed due to security or key concerns

To the extent possible, ETC identified these inaccessible areas to MSU staff. Upon permission, ETC then performed demolition so they could review and sample these areas.

Unfortunately, in this building it was impossible to access all areas. The areas where ETC could not gain access included:

1. Rooms 10, 10A, 10B, and 10C were not accessed due to occupancy by a research lab which did not allow access.
2. Mechanical Room 3B was not able to be accessed with the keys provided.
3. Room 102 was not able to be accessed with the keys provided.

4. Some areas above plaster ceilings and within concrete walls cavities were not accessed to quantify pipe insulation or pipe joint insulation. These areas could not be accessed without permanently damaging the structure.

6.2 AREAS / MATERIALS NOT SURVEYED (PER AGREEMENT)

The survey for this facility required ETC to survey all accessible areas, however, there were some areas which were excluded due to recent renovation or instructions from the client not to survey these areas. These areas are not included in the hard copy of this report nor are they included within the computer program.

It is important to reiterate that ETC can not be held liable for asbestos containing materials that may be located with these areas as we were specifically instructed not to survey or include these areas within the survey.

Areas that were not surveyed within **Building 2-Berkey Hall** include but are not limited to:

1. The roofing system was not surveyed per the request of MSU.

7.0 DATA COLLECTION FORM DESCRIPTION

The field inspection data collection sheets found in Appendix C contains a wealth of information regarding the materials within this building. Each material is rated not on an overall basis, but is rated and described on a room by room basis. This allows ETC to distinguish areas of the facility where the same type of material may be found in different conditions or present different levels of concern. Every line of data pertains to one material within one room or functional area.

It is important to note that the AHERA regulations do not require materials to be rated on this small a scale. According to AHERA inspectors can rate entire materials throughout an entire building. However, ETC determined that by rating materials on a room by room basis, it provides the facility manager with much more valuable and accurate information. Using the ETC system it is possible to get an accurate assessment of the condition of each material within each room.

When reviewing any of these data sheets please refer to the descriptions given below.

- Floor Number

  Describes the floor (level) of the building on which the area in question is located.

- Room Area / Number

  The room area/number is identified from floor plans that have been provided by Michigan State University. However, it may have been necessary for ETC's personnel to assign numbers for each space within the building. *Regardless, the number listed here should correspond to the number listed on the enclosed maps and sample diagrams.*

- Homogeneous Material

  This is a physical description of the material. For instance, 9" x 9" Gray Floor Tile.

- Homogeneous Number

  Each type of homogeneous material, within a specific building, is designated by the building number followed by a two digit number. This number should be the same for all data points involving this material.

- Square Feet

  This category describes the approximate square foot quantity for each material (excluding materials that would be measured in linear feet such as pipe insulation and joints) on a room by room basis. Quantities will not be given if material does not contain asbestos.

- Linear Feet

  This category is for materials (such as pipe insulation and joints) which cannot be expressed in square footage. The linear footage is broken down into 4 separate diameter sizes, so that if there are 36 linear feet of a 3" steam line and 42 linear feet of a 16" steam line in the same room, the different diameters will be noted. There is also a separate line for total linear feet; this indicates the entire quantity of linear footage within the room. (i.e. if you had 36 linear feet of a 3" steam line and 42 linear feet of a 16" steam line in the same room, your total would be 78 linear feet)

- ACM (**A**sbestos **C**ontaining **M**aterial) Status Y/N

  This category is an indication of whether the homogeneous material is considered to contain asbestos or not. Yes (Y) or No (N)

- Friability

  This category describes the tendency of the material to crumble or pulverize when hand pressure is applied. High friability means the material will crumble easily, while Medium to Low friability means the material will not crumble easily. This line is abbreviated as NF-non-friable, LF-low friability, IF-Intermediate friability, or HF-high friability

- ACM Condition

  This category is an overall rating of the asbestos-material. The condition can be listed as good, fair, or poor. Again this rating tends to be a fairly subjective rating but is regulated by the tenants of the AHERA regulations.

- Height of ACM AFF (**A**bove **F**inished **F**loor)

  This column is an indication of the height of the suspected asbestos containing material. This can range from 0' for floor tile to 20' for pipe insulation. This information is provided as the difference in height can make a large difference in the cost for removal. Please note that some materials such as pipe insulation may have a range of height (i.e.: 0-12 for pipe that runs from the floor to the ceiling in a 12' room)

- Remarks

  For information that is specific to this material and location.

8.0 BULK SAMPLE RESULTS FORM DESCRIPTION

The bulk sample results sheets located in Appendix D contain the results of the bulk samples taken during the survey. By reviewing these results, the facility asbestos coordinator (FAC) may verify the actual asbestos content for the materials within this facility.

This information can also be helpful in determining the type and percent of asbestos located within each building material. The type and percentage are important as both affect the likelihood of asbestos becoming airborne. The information regarding asbestos content is also included within the chart located in Appendix A.

This information also provides credentials, certifications and details regarding the laboratories qualifications.

9.0 SUMMARY AND CONCLUSIONS

9.1) Asbestos Survey

All the pertinent information for the asbestos materials within **Building 2-Berkey Hall** can be found within the appendices of this report. Below is a description of the information available in various appendices.

For information regarding materials existing within **Building 2-Berkey Hall**, please refer to Appendices A & B. **Appendix A** lists all the materials that were tested and whether they contain asbestos or not. **Appendix B** is a subset of Appendix A listing only those materials that were positive for asbestos content.

For detailed information on each material found within each room, refer to **Appendix C**. All materials found within a room are listed here. Negative materials are listed as being present but do not have quantities nor condition information. Positive materials are bolded and detail the quantity and condition of this material within this room at the time of the inspection.

If it is ever necessary to verify actual asbestos sampling results, they can be found in **Appendix D**. This information is summarized in Appendix A, but if actual sample results are required, they can be found here.

Appendix E are copies of the maps used for this survey. These are particularly important as they detail where asbestos samples were taken and the layout of the rooms when the survey was conducted. If future renovations change that layout of rooms, these maps will provide a ready reference to conditions at the time of the survey.

Appendices F & G contain certification information for the asbestos inspectors and laboratory used for this building.

9.2) Hazardous Materials Assessment

ETC conducted a hazardous material survey of the building focusing specifically on the presence of mercury thermostats and ballasts in fluorescent lighting that could potentially contain polychlorinated biphenyls (PCBs). ETC inspected the thermostats in each of the accessible rooms and identified 3 different types of thermostats. These types include: Honeywell brand large silver thermostat, Robert Shaw brand small silver thermostat, and Powers brand tan plastic thermostat. All of these types were pneumatically operated and did not contain mercury switches.

ETC also conducted a cursory investigation of the different fluorescent lights throughout the building. ETC identified several different styles of lights throughout the building that included, but is not necessarily limited to: 2'x4' four bulb with opaque plastic covers (located in classrooms, offices and hallways throughout), 1'x4' two bulb with opaque plastic cover (typically located in smaller office hallways), 1'x4' single bulb with metal grate bulb protector (located in bathrooms and mechanical/pantries); 2'x4' 4 bulb with silver large checkerboard cover (typically located in classrooms), 2'x4' 4 bulb with silver small checkerboard cover (also located in classrooms), 2'x4' 4 bulb with silver tiny checkerboard cover (located in classroom 118), 2'x4' 2 bulb curved interior fixture (identified in room 457 only), 1'x4' 2 bulb hanging light (located throughout the 4th floor), and 1'x8' 4 bulb fixture (located in rooms 401A, B, and C only). ETC inspected representative light fixtures of each type throughout the building and did not identify any ballasts that contained PCBs. It should be noted that although ETC did not identify PCB containing ballasts, ETC's assessment was NOT an all-inclusive assessment and ballasts containing PCBs may still be present within the building. It is recommended that all ballasts be checked to verify that they do not contain PCBs prior to removal and/or disposal of any light fixtures. ETC also identified that fixtures throughout were utilizing small energy efficient mercury containing light bulbs throughout the building.

10.0 Signature Page

This report performed by:

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Michael T. Charest
Project Manager
State of Michigan Certified Asbestos Building Inspector
State of Michigan Card #: A26601

Homogenous Materials List for Building #2-Berkey Hall

Homogeneous Material #	*Description*	*Contain Asbestos*	*Material Type**
1	Plaster	N	S
2	Drywall	N	M
3	Drywall Tape	N	M
4	Drywall Joint Compound	N	M
5	Pipe Insulation, 0-4"	Y	T
6	Pipe Joint Insulation, 0-4"	Y	T
7	Pipe Insulation, 5"-7"	Y	T
8	Pipe Joint Insulation, 5"-7"	Y	T
9	Fire Doors	Y	M
10	Chalkboards	Y	M
11	Pipe Insulation, 12" +	Y	T
12	Pipe Joint Insulation, 12" +	Y	T
13	12"x12" Floor Tile, Tan with Beige & Brown Streaks	N	M
14	Mastic for 12"x12" Tan with Beige & Brown Streaks Floor Tile	N	M
15	Cove Base, Brown, 6"	N	M
16	Adhesive for 6" Brown Cove Base	N	M
17	Ceiling Tile, 2'x2' White with Slashed Pattern (recessed)	N	M
18	12"x12" Floor Tile, Beige with Beige & Tan Speckles	N	M
19	Mastic for 12"x12" Beige w/ Beige & Tan Speckles Floor Tile	N	M
20	Cove Base, Brown, 4"	N	M
21	Adhesive for 4" Brown Cove Base	N	M
22	Ceiling Tile, 2'x2' White with Speckled Pattern (Lay-In)	N	M
23	9"x9" Floor Tile, Beige with Dark Beige Streaks	N	M
24	Mastic for 9"x9" Beigh with Dark Beige Streaks Floor Tile	N	M
25	Cove Base, Black, 6"	N	M
26	Adhesive for 6" Black Cove Base	N	M
27	9"x9" Floor Tile, Grey with Beige Streaks	Y	M
28	Mastic for 9"x9" Grey with Beige Streaks Floor Tile	N	M
29	12"x12" Floor Tile, Grey with Grey Speckles	N	M
30	Mastic for 12"x12" Grey with Grey Speckles Floor Tile	N	M
31	Carpet Glue	N	M
32	Linoleum, Black	N	M
33	1'x2' Floor Tile, Black	Y	M
34	Mastic for 1'x2' Black Floor Tile	Y	M
35	12"x12" Floor Tile, White with Tan Speckles	N	M
36	Mastic for 12"x12" White with Tan Speckles Floor Tile	N	M
37	12"x12" Floor Tile, Brown / Black Checkerboard	Y	M
38	Mastic for 12"x12" Brown / Black Checkerboard Floor Tile	N	M
39	Linoleum, Beige Sand Pattern	N	M
40	Ceiling Tile, 12"x12" Random Slashes	N	M
41	Glue Pods for 12"x12" Ceiling Tile with Random Slashes	N	M
42	12"x12" Floor Tile, Beige w/ Dk Brown, Grey & Beige Streaks	N	M
43	Mastic for 12"x12" Beige w/ Dk Brown, Grey & Beige Streak FT	N	M

* M=Miscellaneous, T=Thermal System, S=Surfacing

Homogenous Materials List for Building #2-Berkey Hall

Homogeneous Material #	*Description*	*Contain Asbestos*	*Material Type**
44	Cork Board Insulation	N	M
45	Expansion Cloth	N	M
46	Asphalt Flooring Sealant	Y	M
47	Vinyl Tread Cover Material, Brown	N	M
48	Mastic for Brown Vinyl Tread Cover Material	N	M
49	9"x9" Floor Tile, Dark Brown with Beige Streaks	Y	M
50	Mastic for 9"x9" Dark Brown with Beige Streaks Floor Tile	N	M
51	Ceiling Tile, 2'x2' WHite, Smooth, Recessed	N	M
52	Ceiling Tile, 12"x12" White with Straight Line Dots	N	M
53	Fibrous Paper Backing for 12"x12" White Str. Line Dots CT	N	M
54	Pipe Insulation, Fiberglass, 0-4"	N	T
55	Pipe Insulation, Fiberglass, 5"-7"	N	T
56	Pipe Insulation, Fiberglass, 8"-12"	N	T
57	Pipe Insulation, Fiberglass, 12" +	N	T
58	Sidewalk Caulk	N	M
59	Linoleum, Beige with Tan Swirls	N	M
60	Cove Base, Beige, 4"	N	M
61	Adhesive for 4" Beige Cove Base	N	M
62	9"x9" Floor Tile, Beige with Brown & Orange Specks	Y	M
63	Mastic for 9"x9" Beige with Brown & Orange Specks Floor Tile	Y	M
64	9"x9" Floor Tile, Blue with Beige Streaks	Y	M
65	Mastic for 9"x9" Blue with Beige Streaks Floor Tile	N	M
66	12"x12" Floor Tile, White with Black Speckles	N	M
67	Mastic for 12"x12" White with Black Speckles Floor Tile	N	M

* M=Miscellaneous, T=Thermal System, S=Surfacing