

**ASBESTOS AND LEAD PAINT BUILDING MATERIALS SURVEY FOR:
CHEMICAL FLAMMABLE STORAGE BUILDING
MEMORIAL UNIVERSITY OF NEWFOUNDLAND**



Prepared for:
Memorial University of Newfoundland
St. John's, NL

Pinchin LeBlanc Environmental Ltd
Project No. 02-02-00900

March 26, 2013

EXECUTIVE SUMMARY

Pinchin LeBlanc Environmental Limited (Pinchin) was retained by Memorial University of Newfoundland to perform asbestos and lead paint surveys in selected buildings on the Memorial University of Newfoundland's St. John's, NL campus. A total of twenty-seven (27) buildings were surveyed for asbestos containing materials (ACM) and lead based paints (LBP). This report will provide the findings for the following location:

BUILDING DESCRIPTION: CHEMICAL FLAMMABLE STORAGE BUILDING

BUILDING ADDRESS: MEMORIAL UNIVERSITY OF NL, ST. JOHN'S CAMPUS, NL

A summary of the findings for the chemical flammable storage building on (hereafter referred to as "Site Building") is provided. For specific recommendations regarding any hazardous materials listed the reader will refer to Sections 3 and 4 of this report:

1. No asbestos containing materials were identified within the Site Building. Should any suspect materials not identified within the body of this report be uncovered during maintenance, renovation, or demolition activities, they should be managed as asbestos-containing until representative sampling of the material can determine otherwise.
2. No paints containing greater than 600 mg/kg of lead were identified in the Site Building.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.

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1.0 INTRODUCTION

Pinchin LeBlanc Environmental Limited (Pinchin) was retained by Memorial University of Newfoundland to perform asbestos and lead paint surveys in selected buildings on the Memorial University of Newfoundland's St. John's, NL campus. A total of twenty-seven (27) buildings were surveyed for asbestos containing materials (ACM) and lead based paints (LBP). This report will provide the findings for the following location:

BUILDING DESCRIPTION: CHEMICAL FLAMMABLE STORAGE BUILDING

BUILDING ADDRESS: MEMORIAL UNIVERSITY OF NL, ST. JOHN'S CAMPUS, NL

The report presents a detailed investigation of condition, quantity, location, access, and type of ACM and LBP present in the building. The Overview Report, provided under separate cover, provides detailed information regarding the survey methodology, sampling procedure, evaluation criteria, suspect materials and regulatory information.

Provincial regulations and guidelines distinguish between friable¹ and non-friable² materials. The asbestos building materials survey performed by Pinchin included a search for both friable and common non-friable ACM.

For reporting purposes, the survey will be divided into sections. The report is presented in this manner to accommodate ease in reading and to allow access to report information for specific areas or materials within the building. The report also addresses specific systems and products likely present in the building. The sections of the report are as follows:

- 2.0 Survey Information
- 3.0 ACM Survey Findings
- 4.0 LBP Survey Findings
- 5.0 Recommendations

¹ The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Friable ACM has a much greater potential to release airborne asbestos fibres when disturbed. The most common friable ACM used in the past are sprayed or trowelled materials (for fireproofing or thermal insulation), texture plaster (decorative or acoustic), and mechanical insulations.

² Common non-friable ACM include vinyl floor tiles, ceiling tiles, gasket materials, asbestos cement pipe or board (transite), and asbestos textiles. Although a product may be considered non-friable when new, if the product releases fine dust due to deterioration or during removal, the free dust is considered friable. For example, most lay-in or glued on acoustic ceiling tiles release significant dust during removal of large quantities of these tiles.

2.0 SURVEY INFORMATION

The survey was conducted on March 14th, 2013. The survey, collection of representative bulk samples, and recording of information was performed by Ms. Lori Rice of Pinchin. All accessible areas of the building were inspected for the presence of asbestos containing materials (ACM) and lead based paints (LBP).

A total of three (3) representative bulk samples were collected for analysis for asbestos content.

One (1) bulk sample was collected for analysis of lead content.

3.0 ACM SURVEY FINDINGS

The ACM found during this survey are detailed in the location & data excel document provided to the client. The excel document serves as the clients active asbestos management plan. Quantities of materials identified, locations and friable or non-friable are also present in this excel file. Laboratory certificates for asbestos samples collected are presented in Appendix I and lead samples are presented in Appendix II. Sample location drawings are provided in Appendix III. A photographic record of the samples collected during the survey of the building is presented in Appendix IV. The following is summary of the findings for this building.

3.1 Sprayed or Trowelled Fireproofing and Thermal Insulation

No sprayed or trowelled fireproofing or thermal insulation were observed.

3.2 Mechanical Insulation

No mechanical insulation was observed.

3.3 Acoustic Ceiling Tiles

No acoustic ceiling tiles were observed.

3.4 Drywall, Plaster, and Texture Finishes

No drywall, plaster or texture finishes were observed.

3.5 Vinyl Flooring Materials

No vinyl flooring materials were observed.

3.6 Asbestos Cement Products

No asbestos cement products were observed.

3.7 Vermiculite Insulation

No vermiculite containing products were observed. Visual observations were made above the ceiling and through any hatches.

3.8 Other Asbestos Containing Building Materials

One (1) sample of exterior caulking was collected from the Site Building. Analysis of the sample did not identify the presence of asbestos (reference sample 02-02-900-S001).

One (1) sample of tar on roof shingles was collected from the Site Building. Analysis of the sample did not identify the presence of asbestos (reference sample 02-02-900-S002).

One (1) sample of membrane underneath the exterior brick was collected from the Site Building. Analysis of the sample did not identify the presence of asbestos (reference sample 02-02-900-S003).

4.0 LBP SURVEY FINDINGS

The analyzed paint sample contains less than 0.06% lead.

5.0 RECOMMENDATIONS

No asbestos containing materials or lead based paints were identified within the Site Building. Should any suspect materials not identified within the body of this report be uncovered during maintenance, renovation, or demolition activities, they should be managed as asbestos-containing until representative sampling of the material can determine otherwise.

Should there be any questions pertaining to the contents of this report, please do not hesitate to contact the undersigned at our office.

Pinchin LeBlanc Environmental Limited

Prepared by;

Melanie Snow, M.A.Sc.
Group Manager, Assessment &
Remediation

APPENDIX I

ASBESTOS ANALYTICAL REPORT



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: Pinchin LeBlanc Environmental
27 Austin St
2nd Flr
St Johns NL A1B 4C3

Attn: Dawn Benteau
Paul Staeben

Lab Order ID: 1304976

Analysis ID: 1304976_PLM

Date Received: 3/20/2013

Date Reported: 3/22/2013

Project: 02-02-00900; Chemical & Flammable
Storage

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
02-02-900-S001	Exterior Caulking	None Detected		100% Other	Gray Non Fibrous Homogeneous
1304976PLM_1					Ashed
02-02-900-S002	tar on roof shingles	None Detected	15% Synthetic Fibers	85% Other	Black Fibrous Heterogeneous
1304976PLM_2					Dissolved
02-02-900-S003	membrane underneath brick	None Detected		100% Other	Black Non Fibrous Homogeneous
1304976PLM_3					Ashed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommended that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Dorlos Ammerman (3)

Analyst

Approved Signatory

APPENDIX II

LEAD PAINT ANALYTICAL REPORT



Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy
EPA SW-846 3rd Ed. Method No. 3050B/Method No. 7420



Customer: Pinchin LeBlanc Environmental
27 Austin St
2nd Flr
St Johns NL A1B 4C3

Attn: Dawn Benteau
Paul Staeben

Lab Order ID: 1304980

Analysis ID: 1304980_PBP

Date Received: 3/20/2013

Date Reported: 3/22/2013

Project: 02-02-00900

Sample ID	Description	Mass	Analytical Sensitivity	Concentration
Lab Sample ID	Lab Notes	(g)	(% by weight)	(% by weight)
02-02-900-L001	White paint	0.0634	0.002%	< 0.006%
1304980PBP_1				

The quality control samples run with the samples in this report have passed all AIHA required specifications unless otherwise noted. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by AIHA or any other agency of the U.S. government. (R.L. = 0.01 wt.%)

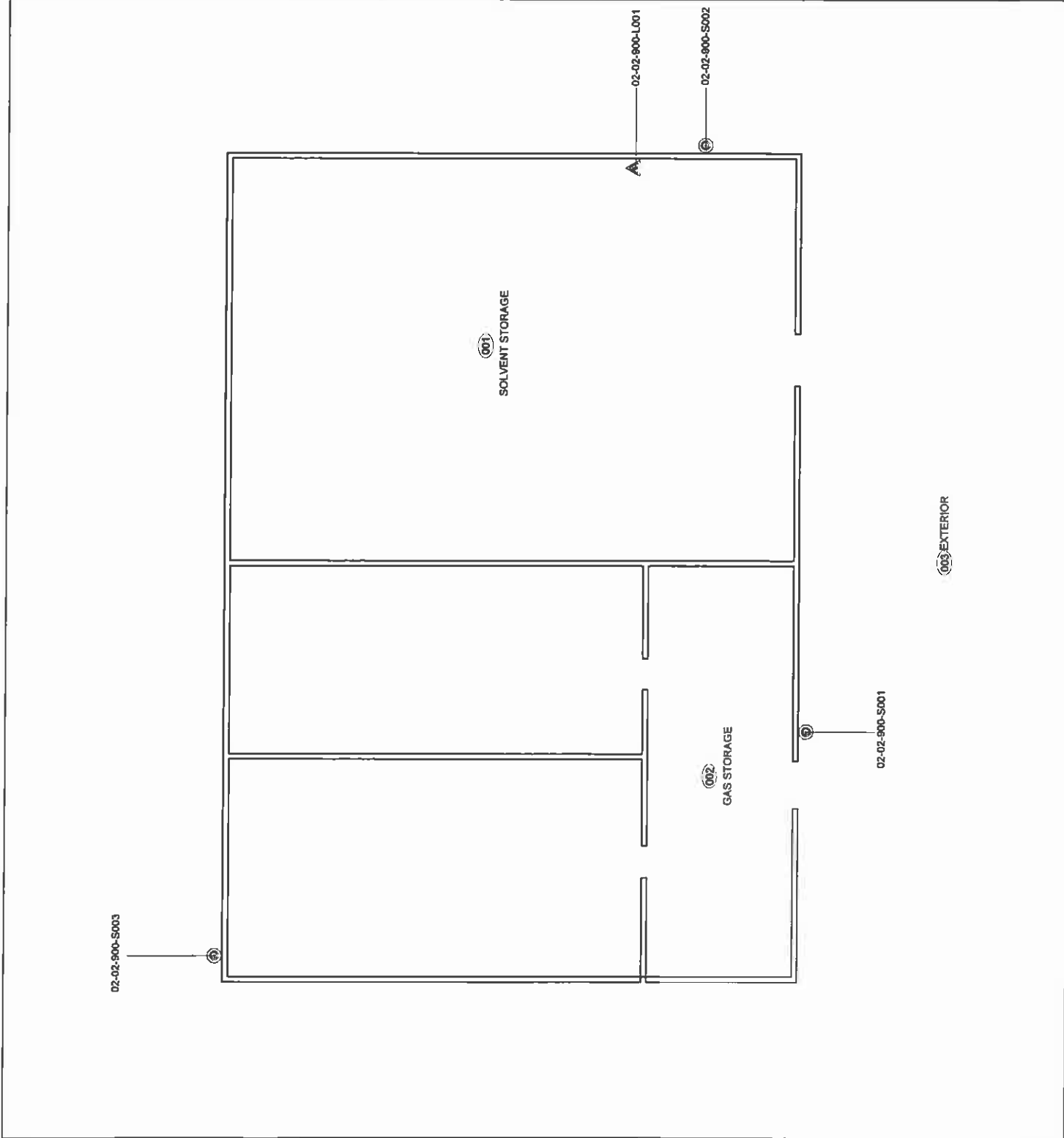
Matt Thomas (1)

Analyst

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Laboratory Director

APPENDIX III
SITE DRAWINGS



LEGEND:

- PINCHIN LOCATION NUMBER
- ASBESTOS SAMPLE ID NUMBER
- LEAD SAMPLE ID NUMBER



CLIENT:

MEMORIAL UNIVERSITY OF
NEWFOUNDLAND

PROJECT:

ASBESTOS AND LEAD PAINT BUILDING
MATERIALS SURVEY

SITE ADDRESS:

CHEMICAL FLAMMABLE STORAGE,
ST. JOHN'S CAMPUS,
NEWFOUNDLAND AND LABRADOR

DRAWING NAME:

SAMPLE LOCATIONS
LEVEL 1

REFERENCE:

PIEL SITE SURVEY

DATE:

MARCH 2013

PROJECT #:

02 - 02 - 00900

SCALE:

N.T.S.

FIGURE #:

DRAWN BY:
A. ANISCIKLI


1

CHECKED BY:


P. STAE BEN

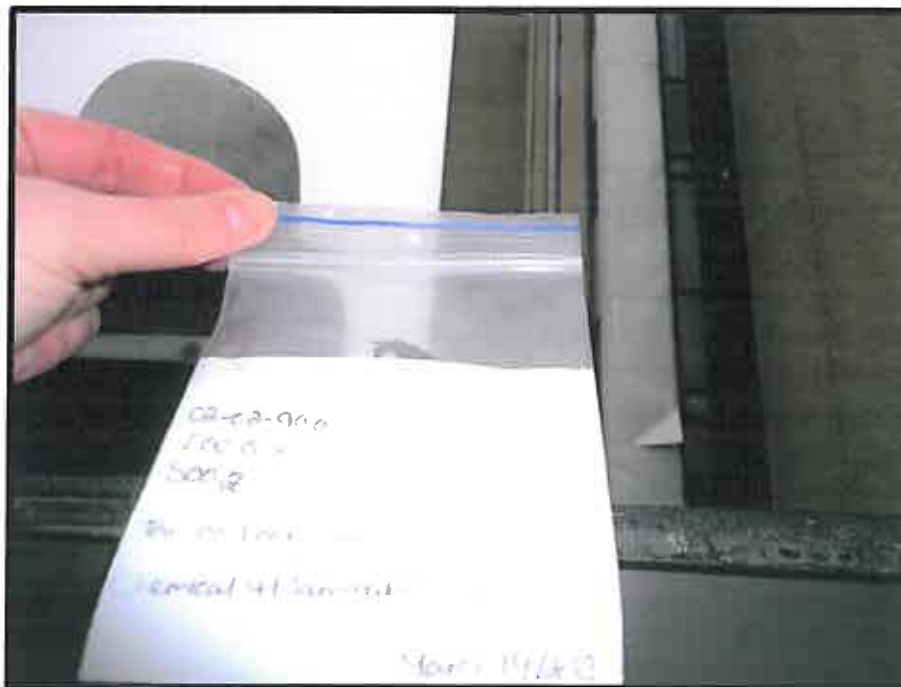
APPENDIX IV

PHOTO SAMPLE LOG

		ASBESTOS BULK SAMPLING FORM	
Sample #:	S001	Date Sampled:	March 14, 2013
Building :	Chemical Flammable Storage	Sampler:	Lori Rice
Location:	003, exterior	Analysis:	SAI – PLM
MUN Project #:	02-02-900	Work Order #:	
Bulk Sampling Parameters			
Pipe/Tank	Flooring	Ceiling	Roofing
<input type="checkbox"/> Insulation <input type="checkbox"/> Elbow <input type="checkbox"/> Fitting <input type="checkbox"/> Transite Pipe <input type="checkbox"/> Gasket <input type="checkbox"/> Tank Insulation <input type="checkbox"/> Pipe Wrap HVAC <input type="checkbox"/> Insulation <input type="checkbox"/> Tape <input type="checkbox"/> Paper Wrap	<input type="checkbox"/> 12'x12' Tile <input type="checkbox"/> 9'x9'Tile <input type="checkbox"/> Vinyl Sheet <input type="checkbox"/> Mastic Wall <input type="checkbox"/> Transite Panel <input type="checkbox"/> Textured Wall <input type="checkbox"/> Plaster <input type="checkbox"/> DWJC	<input type="checkbox"/> Textured <input type="checkbox"/> Stucco <input type="checkbox"/> Popcorn <input type="checkbox"/> DWJC <input type="checkbox"/> Plaster <input type="checkbox"/> Acoustic Tile (Dropped) <input type="checkbox"/> Acoustic Tile (Glued-on) <input type="checkbox"/> Mastic Structural <input type="checkbox"/> Steel F. P. ing <input type="checkbox"/> Deck F. P. ing	<input type="checkbox"/> Shingle <input type="checkbox"/> Rolled <input type="checkbox"/> Felt <input type="checkbox"/> Tar Miscellaneous: Caulking No. of Phases: _____ Colour: <u>Grey</u>
Location		<input type="checkbox"/> Floor <input type="checkbox"/> Wall Orientation <input type="checkbox"/> Ceiling <input type="checkbox"/> Above Ceiling <input checked="" type="checkbox"/> Other (window)	



		ASBESTOS BULK SAMPLING FORM	
Sample #:	S002	Date Sampled:	March 14, 2013
Building :	Chemical Flammable Storage	Sampler:	Lori Rice
Location:	003, exterior	Analysis:	SAI - PLM
MUN Project #:	02-02-900	Work Order #:	
Bulk Sampling Parameters			
Pipe/Tank	Flooring	Ceiling	Roofing
<input type="checkbox"/> Insulation <input type="checkbox"/> Elbow <input type="checkbox"/> Fitting <input type="checkbox"/> Transite Pipe <input type="checkbox"/> Gasket <input type="checkbox"/> Tank Insulation <input type="checkbox"/> Pipe Wrap HVAC <input type="checkbox"/> Insulation <input type="checkbox"/> Tape <input type="checkbox"/> Paper Wrap	<input type="checkbox"/> 12'x12' Tile <input type="checkbox"/> 9'x9'Tile <input type="checkbox"/> Vinyl Sheet <input type="checkbox"/> Mastic Wall <input type="checkbox"/> Transite Panel <input type="checkbox"/> Textured Wall <input type="checkbox"/> Plaster <input type="checkbox"/> DWJC	<input type="checkbox"/> Textured <input type="checkbox"/> Stucco <input type="checkbox"/> Popcorn <input type="checkbox"/> DWJC <input type="checkbox"/> Plaster <input type="checkbox"/> Acoustic Tile (Dropped) <input type="checkbox"/> Acoustic Tile (Glued-on) <input type="checkbox"/> Mastic Structural <input type="checkbox"/> Steel F. P. ing <input type="checkbox"/> Deck F. P. ing	<input checked="" type="checkbox"/> Shingle <input type="checkbox"/> Rolled <input type="checkbox"/> Felt <input checked="" type="checkbox"/> Tar Miscellaneous: Tar No. of Phases: _____ Colour: <u>Black</u>
Location <input type="checkbox"/> Floor <input type="checkbox"/> Wall Orientation <input type="checkbox"/> Ceiling <input type="checkbox"/> Above Ceiling <input type="checkbox"/> Other			





ASBESTOS BULK SAMPLING FORM

Sample #:	S003	Date Sampled:	March 14, 2013
Building :	Chemical Flammable Storage	Sampler:	Lori Rice
Location:	003, exterior	Analysis:	SAI - PLM
MUN Project #:	02-02-900	Work Order #:	

Bulk Sampling Parameters				
Pipe/Tank	Flooring	Ceiling	Roofing	Location
<input type="checkbox"/> Insulation	<input type="checkbox"/> 12'x12' Tile	<input type="checkbox"/> Textured	<input type="checkbox"/> Shingle	<input type="checkbox"/> Floor
<input type="checkbox"/> Elbow	<input type="checkbox"/> 9'x9' Tile	<input type="checkbox"/> Stucco	<input type="checkbox"/> Rolled	<input type="checkbox"/> Wall Orientation
<input type="checkbox"/> Fitting	<input type="checkbox"/> Vinyl Sheet	<input type="checkbox"/> Popcorn	<input type="checkbox"/> Felt	<input type="checkbox"/> Ceiling
<input type="checkbox"/> Transite Pipe	<input type="checkbox"/> Mastic	<input type="checkbox"/> DWJC	<input type="checkbox"/> Tar	<input type="checkbox"/> Above Ceiling
<input type="checkbox"/> Gasket	Wall	<input type="checkbox"/> Plaster		<input checked="" type="checkbox"/> Other (exterior)
<input type="checkbox"/> Tank Insulation	<input type="checkbox"/> Transite Panel	<input type="checkbox"/> Acoustic Tile (Dropped)		
<input type="checkbox"/> Pipe Wrap	<input type="checkbox"/> Textured Wall	<input type="checkbox"/> Acoustic Tile (Glued-on)		
HVAC	<input type="checkbox"/> Plaster	<input type="checkbox"/> Mastic		
<input type="checkbox"/> Insulation	<input type="checkbox"/> DWJC	Structural	Miscellaneous: Black membrane	
<input type="checkbox"/> Tape		<input type="checkbox"/> Steel F. P. ing	No. of Phases: _____	
<input type="checkbox"/> Paper Wrap		<input type="checkbox"/> Deck F. P. ing	Colour: _____	

