

ONLINE INFORMATION

Maritime Electric Cumberland St Main Plant

150 Cumberland St

Charlottetown, PE C1A 7N2



September 16, 2015

2.2 Roofing Inventory Examined

Number of Buildings	1
Number of Individual Roof Areas	21
Total Square Footage	45,012

* Please be aware that there are roofs without square footage

Maritime Electric

Cumberland St Main Plant

Maritime Electric	Roof Rating	Year Installed	Sq. Ft.	Roof Type
<i>Cumberland St Main Plant</i>				
A	Fair		7,130	BUR Gravel Surface
B	No Condition Recorded		820	BUR Gravel Surface
C	Fair		7,580	BUR Gravel Surface
D	No Condition Recorded		820	BUR Gravel Surface
E	Poor		3,392	Modified Bitumen
F	Good		110	Modified Bitumen
G	Poor		3,392	Modified Bitumen
H	Good		8,851	
I	No Condition Recorded		296	Metal
J	No Condition Recorded		296	Metal
K	No Condition Recorded		1,984	Metal
L	No Condition Recorded		92	Modified Bitumen
M	Poor		840	Modified Bitumen
N	Good		4,004	Modified Bitumen
O	Good		594	Modified Bitumen
Office	Fair		3,172	Modified Bitumen
P	Failed		450	Modified Bitumen
Pump House	Good	2005	869	Modified Bitumen
Q	Failed		320	Modified Bitumen
R	Poor			Modified Bitumen
S-metal roof	Fair			Metal
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<i>Building Total:</i>	<i>21 roof area(s)</i>		<i>45,012</i>	

Roofs Sorted by Condition

Number of Buildings	1
Number of Individual Roof Areas	21
Total Square Footage	45,012

Maritime Electric

Cumberland St Main Plant

Good

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	F	110
		H	8,851
		N	4,004
		O	594
		Pump House	869

 Subtotal	5 Roof(s)	14,428 Sq. Ft.
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Fair

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	A	7,130
		C	7,580
		Office	3,172
		S-metal roof	

 Subtotal	4 Roof(s)	17,882 Sq. Ft.
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Poor

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	E	3,392
		G	3,392
		M	840
		R	

 Subtotal	4 Roof(s)	7,624 Sq. Ft.
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Failed


Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	P	450
		Q	320

 Subtotal	2 Roof(s)	770 Sq. Ft.
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No Condition Recorded

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	B	820

 **No Condition Recorded**

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	D	820
		I	296
		J	296
		K	1,984
		L	92
	 Subtotal	6 Roof(s)	4,308 Sq. Ft.
	Grand Total	21 Roof(s)	45,012 Sq. Ft.

Roofs Sorted by Roof Assembly Type

Number of Buildings	1
Number of Individual Roof Areas	21
Total Square Footage	45,012

Maritime Electric

Cumberland St Main Plant

Roof Type:

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	H	8,851
Subtotal		1 Roof(s)	8,851 Sq. Ft.

Roof Type: BUR Gravel Surface

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	A	7,130
		B	820
		C	7,580
		D	820
Subtotal		4 Roof(s)	16,350 Sq. Ft.

Roof Type: Metal

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	I	296
		J	296
		K	1,984
		S-metal roof	
Subtotal		4 Roof(s)	2,576 Sq. Ft.

Roof Type: Modified Bitumen

Region/Facility	Building	Roof	Sq. Ft.
Maritime Electric	<i>Cumberland St Main Plant</i>	E	3,392
		F	110
		G	3,392
		L	92
		M	840
		N	4,004
		O	594
		Office	3,172
		P	450

Roof Type: Modified Bitumen

Region/Facility	Building	Roof	Sq. Ft.
		Pump House	869
Maritime Electric	<i>Cumberland St Main Plant</i>	Q	320
		R	
	Subtotal	12 Roof(s)	17,235 Sq. Ft.
	Grand Total	21 Roof(s)	45,012 Sq. Ft.

Roof Inspection Report



Maritime Electric
Cumberland St Main Plant

150 Cumberland St
Charlottetown, PE



04/09/2014, 05/09/2014

Maritime Electric

Cumberland St Main Plant

150 Cumberland St
Charlottetown, PE C1A 7N2



	Good
	Fair
	Poor
	Failed
	No Condition Recorded

BUILDING FACILITY SUMMARY

Tremco was on site on September 4th, 2014 in order to perform a thermal scan of the Cumberland St Plant as well as the pumphouse unit. Weather was 20C at 8:00pm with clear skies.

The facility consists of Build up gravel surface roof systems on roof area A,B,C,D. Roof area A and C are in fair conditions. Maintenance deficiencies such as deteriorated mastic at pitch pans, deteriorated sealant at perimeter and vegetation growth on roof surface were noted. These maintenance items should be addressed in order to not permit deterioration of room system. Roof area B and D could not be inspected as there was no roof access.

Roof area E,F,G,H,M,N,,O,P,Q and the Office roof area are all modified bitumen roof systems. Roof area P and Q are in a failed state. Roof replacement is the most viable recommendation at this time. Major flashing deficiencies and large blisters were noted on roof areas. Roof area E,G,M and R are on poor condition. Granular loss and membrane staining was noted. @372 sq ft of wet insulation was detected with thermal scanning. This wet should be removed and replaced as soon as possible before it begins spreading accros roof area. Staining and granular loss should be monitored in order to gauge rate of deterioration. The Office area has been coated with fluid applied polyurethane coating. This roof is in fair condition. Roof area should be monitored at the perimeter as current roof coating performance would indicate that water is sitting near drip edge. Roof areas F,G,H,N and O are in good condition. Minor maintenance items should be addressed.

Roof areas I,J,K and L are corrugated metal roofs. Tremco could not get access to these roof areas so no conditions were recorded.

Roof maintenance and replacement work should be addressed based on condition and priorities.

If maintaining the roof areas in proper performing condition is of vital importance, it is recommended that roof areas be scanned and inspected on an annually basis in order to identify deficiencies before they develop into costly repairs or failed roof conditions.

Budget estimates for all required roof repairs and replacements is to be provided.

GENERAL INFORMATION

Roof Name	A
Service Activity Type	Thermocore
Service Activity Date	September 05, 2014
Roof Leaks	No
Roof Size	7,130 sq. ft. 662.64 sq. meters
Roof Type	BUR Gravel Surface
Replacement Cost	\$156,860.00
Roof Rating	Fair

**ROOF COMPOSITION**

4 Ply build up roof system.

OVERALL CONDITION

Roof is in Fair condition

VISIBLE ROOF DEFECTS

South corner pitch pan requires attention. Fall arrest work plan will be required.

North west corner chimney unit is corroding.

South perimeter gravel stop caulking requires attention. . Fall arrest work plan will be required.

Chimney unit mastic requires attention.

RECOMMENDATIONS

Address all deficient mastic on chimney units.

Address caulking at roof perimeter.

Coat corrosive chimney with aluminum coating.

Rescan roof area in 2015

URGENCY ITEMS

Address all deficient mastic on chimney units.

Address caulking at roof perimeter.

SCAN HISTORY

Tremco scanned in 2008

Tremco scanned in 2010

Tremco scanned in 2012

Tremco scanned in 2014



Roof View from North East corner



Perimeter View from North East corner



South corner pitch pan requires attention. Fall arrest work plan will be required.



North west corner chimney unit is corroding.



South perimeter gravel stop caulking requires attention.



Chimney unit mastic requires attention.



Chimney unit mastic requires attention.

GENERAL INFORMATION

Roof Name B
Service Activity Type Thermocore
Service Activity Date September 04, 2014
Roof Leaks No
Roof Size 820 sq. ft.
76.21 sq. meters
Roof Type BUR Gravel Surface
Replacement Cost \$18,040.00
Roof Rating No Condition Recorded



ROOF COMPOSITION

BUR gravel surface.

OVERALL CONDITION

No condition recorded.



Penthouse roof view. Not currently ladder accessible.

GENERAL INFORMATION

Roof Name	C
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	7,580 sq. ft. 704.46 sq. meters
Roof Type	BUR Gravel Surface
Roof Rating	Fair

**ROOF COMPOSITION**

BUR roof system with gravel surface
3 Ply Build up roof system with gravel surface
0.5 in Fiberboard
1.5 in Polyurethane insulation
Kraft paper
Steel deck

OVERALL CONDITION

Roof is in Fair condition

VISIBLE ROOF DEFECTS

Blueberries identified on roof surface.
Chimney unit mastic requires attention.
Low vent unit flashing height. Flashing curb should be minimum 8in above roof surface.
Small amount of vegetation growth visible.
Soil stack mastic requires attention.

RECOMMENDATIONS

Have all deteriorated mastic at chimney and soil stack units addressed.
Remove all vegetation from roof area.
Rescan roof area in 2015

URGENCY ITEMS

Have all deteriorated mastic at chimney and soil stack units addressed.
Remove all vegetation from roof area.

SCAN HISTORY

Tremco scanned in 2008

Tremco scanned in 2010

Tremco scanned in 2012

Tremco scanned in 2014



Roof view



Verification cut performed to inspect for wet insulation. No wet identified.



Verification cut performed to inspect for wet insulation. No wet identified.



Chimney unit pitch pan requires attention.



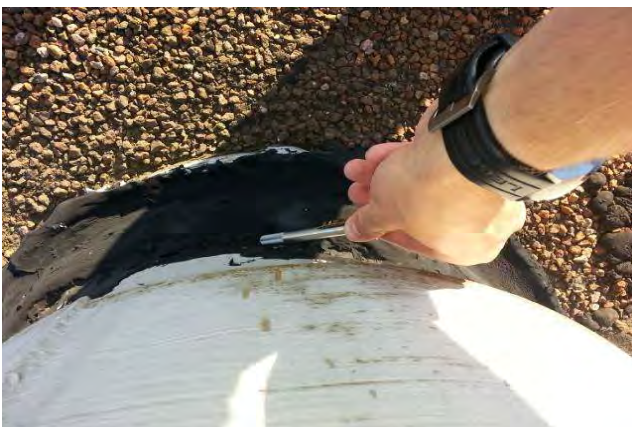
Chimney unit pitch pan requires attention.



Low vent unit flashing height. Flashing curb should be minimum 8in above roof surface.



Drain flashing has been sealed with Modified Bitumen detail.



Chimney unit mastic requires attention.



Blueberries identified on roof surface. They are formed when water penetrates the top flood coat of asphalt. Freeze-thaw cycling breaks pieces of the flood coat loose allowing wind and the elements to move these pieces around until they are eroded to a spherical shape resembling small blueberries. Subsequently, water flow causes them to accumulate in low spots on the roof. Blueberries indicate there are areas of the surfacing asphalt that have degraded and thus broken from the surface. This can lead to subsequent bare spots and accelerated roof system degradation.



Blueberries identified on roof surface. They are formed when water penetrates the top flood coat of asphalt. Freeze-thaw cycling breaks pieces of the flood coat loose allowing wind and the elements to move these pieces around until they are eroded to a spherical shape resembling small blueberries. Subsequently, water flow causes them to accumulate in low spots on the roof. Blueberries indicate there are areas of the surfacing asphalt that have degraded and thus broken from the surface. This can lead to subsequent bare spots and accelerated roof system degradation.



Penthouse flashing detail is very low. Proper flashing detail should be minimum 8in above roof surface.



Drain flashing has been sealed with Modified Bitumen detail. Small amount of vegetation growth visible.



Soil stack mastic requires attention.



Soil stack mastic requires attention.



Soil stack mastic requires attention.



View of soil stack and vent units. All mastic at flashing requires attention.

GENERAL INFORMATION

Roof Name D
Service Activity Type Thermocore
Service Activity Date September 04, 2014
Roof Leaks No
Roof Size 820 sq. ft.
76.21 sq. meters
Roof Type BUR Gravel Surface
Roof Rating No Condition Recorded



ROOF COMPOSITION

BUR roof system with gravel surface

OVERALL CONDITION

No condition recorded.



Roof view. No ladder access to roof unit.

GENERAL INFORMATION

Roof Name	E
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	3,392 sq. ft. 315.24 sq. meters
Roof Type	Modified Bitumen
Restoration Cost	\$20,352.00
Roof Rating	Poor
Year to Restore	1

**ROOF COMPOSITION**

Modified bitumen roof system.
 3 ply modified bitumen roof with granule surface
 0.5 in Fiberboard
 1.5 in Polyurethane insulation
 Kraft paper
 Steel deck

OVERALL CONDITION

Roof is in poor condition

VISIBLE ROOF DEFECTS

Noticeable staining and granular loss on modified bitumen membrane.
 Thermal scan identified @ 263 sq ft of wet insulation.
 Noticeable staining and granular loss on modified bitumen membrane near roof drain.

RECOMMENDATIONS

Remove and replace wet insulation
 Restore roof area with protective aluminum pigment coating.
 Rescan in 2015

URGENCY ITEMS

Remove and replace wet insulation.

SCAN HISTORY

Tremco scanned in 2008

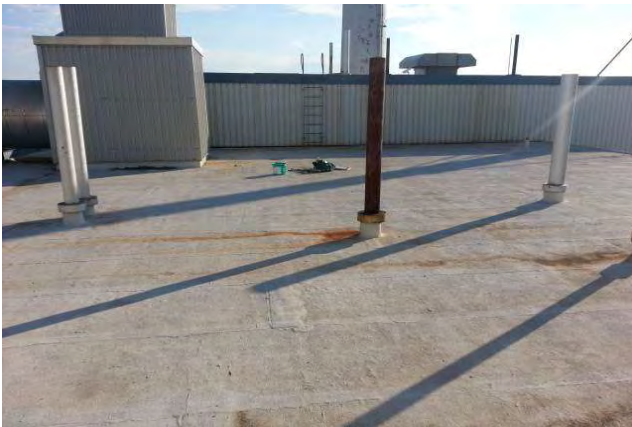
Tremco scanned in 2010

Tremco scanned in 2012

Tremco scanned in 2014



Roof view



Roof view



Thermogram photo # 2 identified @ 28 sq ft of wet insulation.



Daytime thermogram photo # 2



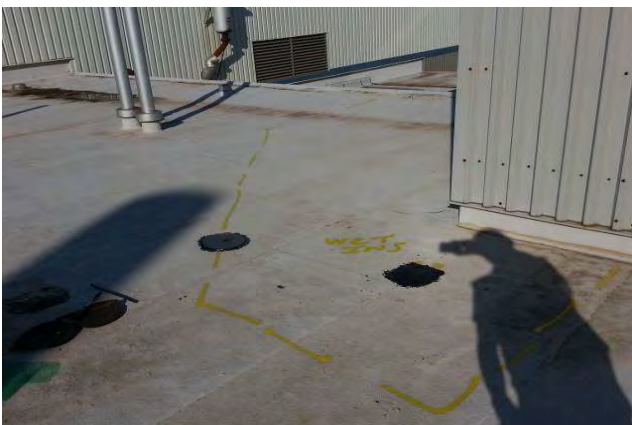
Verification cut indicates wet insulation.



Thermogram photo # 3 identified @ 226 sq ft of wet insulation.



Daytime thermogram photo # 3.



Daytime thermogram photo # 3.



Test cut identifies wet insulation.



Noticeable staining and granular loss on modified bitumen membrane.



Visible granular loss on roof membrane.



Test cut indicates @ 9 sq ft of wet insulation



Noticeable staining and granular loss on modified bitumen membrane near roof drain.

GENERAL INFORMATION

Roof Name	F
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	110 sq. ft. 10.22 sq. meters
Roof Type	Modified Bitumen
Roof Rating	Good

**ROOF COMPOSITION**

Modified bitumen roof system.
3 ply modified bitumen roof with granule surface
0.5 in Fiberboard
1.5 in Polyurethane insulation
Kraft paper
Steel deck

OVERALL CONDITION

Roof is in good condition

VISIBLE ROOF DEFECTS

No defects identified.

RECOMMENDATIONS

Rescan in 2015

SCAN HISTORY

Tremco scanned in 2014



Penthouse roof area. No wet identified during thermal scan

GENERAL INFORMATION

Roof Name	G
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	3,392 sq. ft. 315.24 sq. meters
Roof Type	Modified Bitumen
Replacement Cost	\$20,352.00
Roof Rating	Poor

**ROOF COMPOSITION**

BUR roof system with gravel surface
 3 Ply Build up roof system with gravel surface
 0.5 in Fiberboard
 1.5 in Polyurethane insulation
 Kraft paper
 Steel deck

OVERALL CONDITION

Roof is in Poor condition

VISIBLE ROOF DEFECTS

Noticeable staining and granular loss on modified bitumen membrane.
 Thermal scan identified @ 109 sq ft of wet insulation.
 Noticeable staining and granular loss on modified bitumen membrane near roof drain.
 Visible ponding water ovetop previous roof repair.

RECOMMENDATIONS

Remove and replace wet insulation.
 Rescan in 2015.

URGENCY ITEMS

Remove and replace wet insulation.
 Rescan in 2015.

SCAN HISTORY

Tremco scanned in 2008

Tremco scanned in 2010

Tremco scanned in 2012

Tremco scanned in 2014



Roof view. Visible staining and granular loss on roof membrane.



Roof view



Thermal scan photo #4 identified @ 90 sq ft of wet insulation.



Daytime thermogram photo # 4



Visible staining and granular loss on roof membrane.



Thermal scan identified @ 10 sq ft of wet felts within roof area.



Visible ponding water overtop previous roof repair.



Visible ponding water overtop previous roof repair.



Thermal scan identified @9 sq ft of wet within system. Fall arrest work plan will be necessary.



Visible ponding water overtop roof system. Water pouring out of hvac unit is not slopping to drain.



Water pouring out of hvac unit is not slopping to drain.



Water pouring out of hvac unit is not slopping to drain.



Noticeable staining and granular loss on modified bitumen membrane near roof drain.

GENERAL INFORMATION

Roof Name H
 Service Activity Type Thermocore
 Service Activity Date September 04, 2014
 Warranty Effective Date: October 06, 2008
 Expiration Date: October 06, 2018
 Information: 5252-Warranty Main Bldg.
 area H (2-Ply MB)
 Installing Contractor Ashe Roofing
 Roof Leaks No
 Roof Size 8,851 sq. ft.
 822.58 sq. meters
 Roof Rating Good

**ROOF COMPOSITION**

Modified bitumen roof system with fluid applied restoration system.

OVERALL CONDITION

Roof is in Good condition.

VISIBLE ROOF DEFECTS

Clogged drain requires attention.
 Low flashing detail. Proper flashing detail is minimum 8in from roof surface.
 Visible debris at roof valley and drains.

RECOMMENDATIONS

Clean out debris from clogged drain and valley. Inspect drain regularly following housekeeping.
 Reinspect in 2015

URGENCY ITEMS

Clean out debris from clogged drain and valley. Inspect drain regularly following housekeeping.

SCAN HISTORY

Tremco scanned in 2008
 Tremco scanned in 2010
 Tremco scanned in 2012
 Tremco scanned in 2014



Roof view.



Roof view.



Roof view.



Roof view



Roof view of North east side



Roof view of North east side



Roof view of south east side



Clogged drain.



Clogged drain.



Clogged drain. All debris should be cleaned off roof area.



Debris visible around drain area.



Debris visible around drain area.



Debris visible at valley



Debris visible at valley



Debris visible at valley



Debris visible at valley



Low flashing detail. Proper flashing detail is minimum 8in from roof surface.



Skylights identified at roof ridge.

GENERAL INFORMATION

Roof Name I
Service Activity Type Thermocore
Service Activity Date September 04, 2014
Roof Leaks No
Roof Size 296 sq. ft.
27.51 sq. meters
Roof Type Metal
Roof Rating No Condition Recorded



ROOF COMPOSITION

Corrugated metal roof.

OVERALL CONDITION

No condition recorded. No access to roof area.

GENERAL INFORMATION

Roof Name	J
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	296 sq. ft. 27.51 sq. meters
Roof Type	Metal
Roof Rating	No Condition Recorded

**ROOF COMPOSITION**

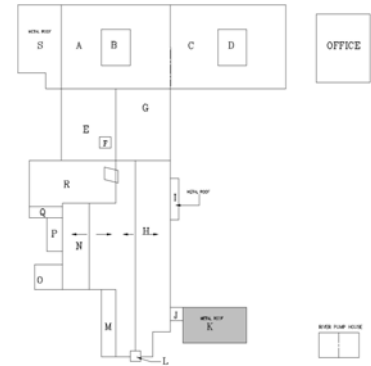
Corrugated metal roof.

OVERALL CONDITION

No condition recorded. No access to roof area.

GENERAL INFORMATION

Roof Name	K
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	1,984 sq. ft. 184.39 sq. meters
Roof Type	Metal
Roof Rating	No Condition Recorded

**ROOF COMPOSITION**

Corrugated Metal roof

OVERALL CONDITION

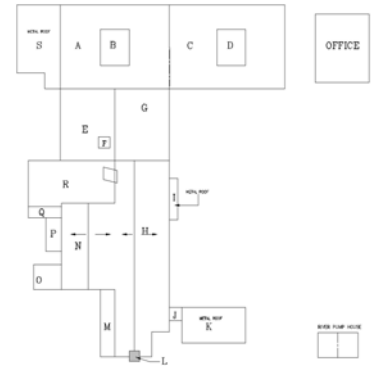
No condition recorded. No access to roof area.



Roof view. No condition recorded. No access to roof area.

GENERAL INFORMATION

Roof Name L
Service Activity Type Thermocore
Service Activity Date September 04, 2014
Roof Leaks No
Roof Size 92 sq. ft.
8.55 sq. meters
Roof Type Modified Bitumen
Roof Rating No Condition Recorded



ROOF COMPOSITION

Corrugated metal roof.

OVERALL CONDITION

No access to roof area.

GENERAL INFORMATION

Roof Name	M
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	840 sq. ft. 78.07 sq. meters
Roof Type	Modified Bitumen
Replacement Cost	\$5,460.00
Roof Rating	Poor
Year to Replace	1

**ROOF COMPOSITION**

Modified bitumen roof membrane.

OVERALL CONDITION

Roof is in Poor condition

VISIBLE ROOF DEFECTS

Roof membrane is in poor condition. No granular surface visible.

RECOMMENDATIONS

Coat roof membrane with restoration coating.
Rescan in 2015.

URGENCY ITEMS

Coat roof membrane with restoration coating.

SCAN HISTORY

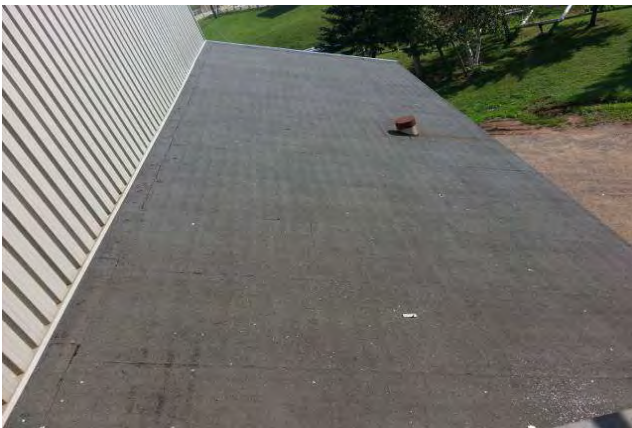
Tremco scanned in 2008
Tremco scanned in 2010
Tremco scanned in 2012
Tremco scanned in 2014



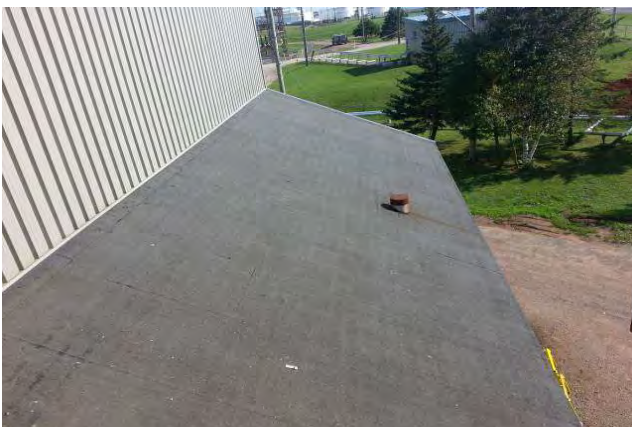
Roof view.



Roof view. Sloped Modified bitumen membrane.



Roof membrane is in poor condition. No granular surface visible.



Roof membrane is in poor condition. No granular surface visible.

GENERAL INFORMATION

Roof Name	N
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	4,004 sq. ft. 372.12 sq. meters
Roof Type	Modified Bitumen
Roof Rating	Good

**ROOF COMPOSITION**

Modified bitumen roof system with fluid applied coating system.

OVERALL CONDITION

Roof is in good condition

VISIBLE ROOF DEFECTS

No defects identified.

RECOMMENDATIONS

Reinspect in 2015.

SCAN HISTORY

Tremco scanned in 2008
Tremco scanned in 2010
Tremco scanned in 2012
Tremco scanned in 2014



Roof view.

GENERAL INFORMATION

Roof Name	O
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	594 sq. ft. 55.20 sq. meters
Roof Type	Modified Bitumen
Roof Rating	Good

**ROOF COMPOSITION**

Modified bitumen roof system with fluid applied coating system.

OVERALL CONDITION

Roof is in good condition.

VISIBLE ROOF DEFECTS

No defects identified.

RECOMMENDATIONS

Reinspect in 2015.

SCAN HISTORY

Tremco scanned in 2008
Tremco scanned in 2010
Tremco scanned in 2012
Tremco scanned in 2014



Roof view



Roof view



Roof view

GENERAL INFORMATION

Roof Name	Office
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	3,172 sq. ft. 294.80 sq. meters
Roof Type	Modified Bitumen
Roof Rating	Fair

ROOF COMPOSITION

Modified bitumen roof system with fluid applied coating

OVERALL CONDITION

Roof is in fair condition.

VISIBLE ROOF DEFECTS

Poor quality drip edge detail is causing water to stay at perimeter. Causing deterioration of perimeter coating.

RECOMMENDATIONS

Rescan in 2015.

SCAN HISTORY

Tremco scanned in 2008
Tremco scanned in 2010
Tremco scanned in 2012
Tremco scanned in 2014



Roof view. Restorative fluid applied coating overtop Modified Bitumen roof surface.



Roof view. Restorative fluid applied coating overtop Modified Bitumen roof surface.



Hvac unit.



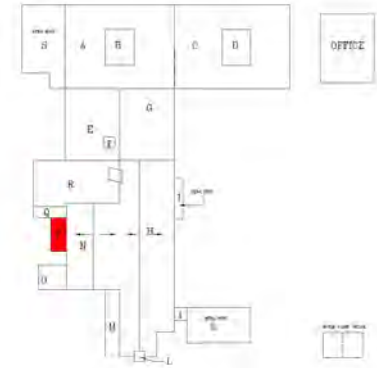
Poor quality drip edge detail affecting exterior drainage system. Deteriorating restorative coating at roof perimeter.



Poor quality drip edge detail affecting exterior drainage system. Deteriorating restorative coating at roof perimeter.

GENERAL INFORMATION

Roof Name	P
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	450 sq. ft. 41.82 sq. meters
Roof Type	Modified Bitumen
Replacement Cost	\$15,750.00
Roof Rating	Failed

**ROOF COMPOSITION**

Modified bitumen roof system.
 3 ply modified bitumen roof with granule surface
 0.5 in Fiberboard
 1.5 in Polyurethane insulation
 Kraft paper
 Steel deck

OVERALL CONDITION

Roof is in a failed state.

VISIBLE ROOF DEFECTS

Roof gravel stop detail is completely deteriorated. Water can infiltrate roof system.
 Poor flashing detail at South wall. Low flashing height and mastic is deteriorating.
 Mastic at soil stack needs to be addressed.

RECOMMENDATIONS

Replace roof.

URGENCY ITEMS

Replace roof.

SCAN HISTORY

Tremco scanned in 2008
 Tremco scanned in 2010
 Tremco scanned in 2012
 Tremco scanned in 2014



Roof view. Previous repairs visible.



Roof gravel stop detail is completely deteriorated. Water can infiltrate roof system.



Poor flashing detail at South wall. Low flashing height and mastic is deteriorating.



Mastic at soil stack needs to be addressed.



Mastic at soil stack needs to be addressed.

GENERAL INFORMATION

Roof Name	Pump House
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Year of Installation	2005
Roof Leaks	No
Roof Size	869 sq. ft. 80.76 sq. meters
Roof Type	Modified Bitumen
Roof Rating	Good

**ROOF COMPOSITION**

Modified bitumen roof system with aluminum pigment restorative coating.

OVERALL CONDITION

Roof is in good condition.

VISIBLE ROOF DEFECTS

No defects noted.

RECOMMENDATIONS

Scan and inspect in 2015.

SCAN HISTORY

Tremco scanned in 2008
Tremco scanned in 2010
Tremco scanned in 2012
Tremco scanned in 2014



Roof view. Aluminum pigment coating is visible.



Thermogram photo #1 indicating dry insulation throughout roof membrane.



Daytime thermogram photo #1



Aluminum pigment coating applied throughout roof surface. Roof Sleeper is coated.



Minor water visible at East perimeter. As rainfall was within 24h, ponding water cannot be confirmed.



Minor water visible at SW perimeter. As rainfall was within 24h, ponding water cannot be confirmed.

GENERAL INFORMATION

Roof Name	Q
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Size	320 sq. ft. 29.74 sq. meters
Roof Type	Modified Bitumen
Replacement Cost	\$9,600.00
Roof Rating	Failed

**ROOF COMPOSITION**

Modified bitumen roof system with granular surface.

OVERALL CONDITION

Roof is in a failed state.

VISIBLE ROOF DEFECTS

Many previous repairs are visible.
Open lap seam at perimeter.
Granular loss on roof membrane is visible.
Poor metal counter flashing detail at perimeter.

RECOMMENDATIONS

Replace roof

SCAN HISTORY

Tremco scanned in 2008
Tremco scanned in 2010
Tremco scanned in 2012
Tremco scanned in 2014



Roof view. Previous repairs are visible.



Roof view. Previous repairs are visible.



Roof view. Previous repairs are visible.



Open lap seam at perimeter.



Open lap seam at perimeter.



Granular loss on roof membrane is visible.



Open lap seam at perimeter.



Open lap seam at perimeter.



Poor metal counter flashing detail at perimeter.

GENERAL INFORMATION

Roof Name R
Service Activity Type Thermocore
Service Activity Date September 04, 2014
Roof Leaks No
Roof Type Modified Bitumen
Roof Rating Poor

**ROOF COMPOSITION**

Modified bitumen roof system.
3 ply modified bitumen roof with granule surface
0.5 in Fiberboard
1.5 in Polyurethane insulation
Kraft paper
Steel deck

OVERALL CONDITION

Roof is in poor condition

VISIBLE ROOF DEFECTS

Large blisters visible on roof membrane
Blisters visible throughout roof membrane
Low flashing height at wall. Proper flashing detail is minimum 8in above roof surface.
Low flashing height at curb unit. Proper flashing detail is minimum 8in above roof surface.
Low flashing height at cap unit.
Monitoring camera mastic should be addressed.

RECOMMENDATIONS

Cut out and repair blisters throughout roof membrane.
Rescan in 2015.

URGENCY ITEMS

Cut out and repair blisters throughout roof membrane.

SCAN HISTORY

Tremco scanned in 2008

Tremco scanned in 2010

Tremco scanned in 2012

Tremco scanned in 2014



Roof view.



Roof view



Roof view. Blisters visible on roof membrane.



Blisters visible on roof membrane.



Large blisters visible on roof membrane.



Blisters visible throughout roof membrane.



Low flashing height at cap unit.



Previous roof repair is visible.



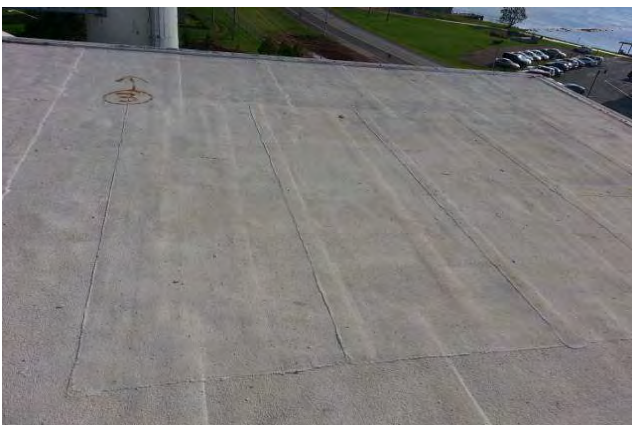
Monitoring camera.



Monitoring camera mastic should be addressed.



Chimney unit.



Previous roof repair is visible.



Low flashing height at curb unit. Proper flashing detail is minimum 8in above roof surface.

GENERAL INFORMATION

Roof Name	S-metal roof
Service Activity Type	Thermocore
Service Activity Date	September 04, 2014
Roof Leaks	No
Roof Type	Metal
Roof Rating	Fair

**ROOF COMPOSITION**

Corrugated metal roof.

OVERALL CONDITION

Roof is in fair condition.

VISIBLE ROOF DEFECTS

No defects noted.

RECOMMENDATIONS

Some corrosion visible on metal roof membrane.

URGENCY ITEMS

Reinspect in 2015.



Roof view. Some corrosion visible on metal roof membrane.