# UNIVERSITY OF KENTUCKY MEDICAL CENTER PHYSICAL PLANT DIVISION RENOVATION PROJECT BUDGET

TO:	Matt Mueller	DATE:		22-Aug-18			
DEPARTMENT:	MCPPD	PROJECT I	MGR:	Lonnie Driscoll			
BUILDING:	HSRB	APPROVE	D:				
				Construction Manager			
We estimate the co	osts for this project to b	e approximately	<u>\$138,000</u>	for the following work:			
Project No.: Description:	8304 HSRB RF RF 601,	602,603 Replace					
Check Applicable:	□ Upgrade		☐ New Equipme	nt			
Does the function	of the space change:	☑ No	Yes (Detail in Work	Involved)			
Duration of Project Work Involved:	Duration of Project (anticipated): 12 weeks (weather dependent) Work Involved:						
Replace roofs RF 6	601, 602, 603 with Neog	ard foam roof system	<u> </u>				
•	•						

THE PHYSICAL PLANT DIVISION IS FREQUENTLY REQUIRED TO DO ADDITIONAL WORK ON JOB ORDERS AS A RESULT OF UNFORESEEN CONDITIONS OR MATTERS OF EXPEDIENCY. DUE TO CHANGING CONDITIONS AND PURCHASING PROCEDURES, MATERIAL PRICES ARE SUBJECT TO CHANGE WITH MARKET CONDITIONS. IN ORDER TO MEET DEADLINES IT IS ALSO FREQUENTLY NECESSARY TO USE MATERIALS HIGHER OR LOWER IN PRICE THAN THOSE CONTEMPLATED AT THE TIME THE ESTIMATE IS MADE. UNDER THESE CIRCUMSTANCES, IT MUST BE UNDERSTOOD THAT WE CANNOT GUARANTEE ESTIMATES, AND ALL BILLINGS WILL BE RENDERED AT EXACT COST OF LABOR, MATERIALS, AND OVERHEAD. SHOULD ANY

### Medical Center Physical Plant Division Project Budget Summary

Project No.: 8304

Description: HSRB RF RF 601,602,603 Replace

Project Manager: Lonnie Driscoll

Date: 8/22/18

	Rate	Manhours	Total Cost
Design:			
Consultant Design		0.0	\$0.00
PPD Design	\$ 84.75	0.0	\$0.00
Engineering Aide	\$ 41.25	8.0	\$330.00
Project Management	\$ 93.00	0.0	\$0.00
State Review Fee (1 or 0)	\$ 300.00	0.0	\$0.00
<b>Design Contingency</b>		0.1	\$33.00

Total Design & Design Management \$363.00

#### Construction:

Project Management	\$ 93.00	25.0	\$2,325.00
Project Superintendent	\$ 58.00	25.0	\$1,450.00
PPD Construction			\$0.00
Unit Price Contractor			\$120,000.00
Bid Contractor			\$0.00
Casework Vendor			\$0.00
Asbestos Abatement			\$0.00
UK Communications			\$0.00
Owner Purchased Material			\$0.00
Roofing Contractor			\$0.00
Carpet			\$0.00
Interior Design Services	\$ 30.00	0.0	\$0.00
			\$0.00
			\$0.00
			\$0.00
Subtotal Construction			\$123,775.00
Dumpster Charges (1% or 0%)		1.0%	\$1,237.75
Contingency		10%	\$12,624.25

Total Construction \$137,637.00

# UNIVERSITY OF KENTUCKY MEDICAL CENTER PHYSICAL PLANT DIVISION RENOVATION PROJECT BUDGET

TO:	Matt Mueller	DATE:		26-Sep-19
DEPARTMENT:	MCPPD	PROJEC	T MGR:	Tina Arthur
BUILDING:	HSRB	APPROV	ED:	
		_		Construction Manager
We estimate the co	osts for this project to b	e approximately	<u>\$85,000</u>	for the following work:
Project No.: Description:	0 HSRB RF 501 - 50	5 and 507 Roof	FReplacement	
Check Applicable:	☐ Upgrade	□ Replacement	☐ New Equipme	nt
Does the function	of the space change:	□ No	☐ Yes (Detail in Work	(Involved)
Duration of Project Work Involved:	t (anticipated):			
Replace RF 501, 50	02, 503, 504, 505, 507 wi	ith Neogard foam re	oof system	
,	, , ,	-	•	

THE PHYSICAL PLANT DIVISION IS FREQUENTLY REQUIRED TO DO ADDITIONAL WORK ON JOB ORDERS AS A RESULT OF UNFORESEEN CONDITIONS OR MATTERS OF EXPEDIENCY. DUE TO CHANGING CONDITIONS AND PURCHASING PROCEDURES, MATERIAL PRICES ARE SUBJECT TO CHANGE WITH MARKET CONDITIONS. IN ORDER TO MEET DEADLINES IT IS ALSO FREQUENTLY NECESSARY TO USE MATERIALS HIGHER OR LOWER IN PRICE THAN THOSE CONTEMPLATED AT THE TIME THE ESTIMATE IS MADE. UNDER THESE CIRCUMSTANCES, IT MUST BE UNDERSTOOD THAT WE CANNOT GUARANTEE ESTIMATES, AND ALL BILLINGS WILL BE RENDERED AT EXACT COST OF LABOR, MATERIALS, AND OVERHEAD. SHOULD ANY

## Medical Center Physical Plant Division Project Budget Summary

Project No.: Description:	HSRB RF 5	i01 - 505 ar	nd 507 Roof F	Renlacement
Description.	TIONED IN C	,	14 007 11001 1	topiaocinicint
Project Manager:	Tina Arthur			
Date:	9/26/19			
		Dete	Manhaura	Total Conf
Design:		Rate	Manhours	Total Cost
Consultant Design			0.0	\$0.00
PPD Design		\$ 84.75	0.0	\$0.00
Engineering Aide		\$ 41.25	8.0	\$330.00
Project Management		\$ 93.00	0.0	\$0.00
State Review Fee	(1 or 0)	\$ 300.00	0.0	\$0.00
Design Contingency			0.1	\$33.00
Total Design & De	sign Mana	gement	•	\$363.00
_	_			
Construction:				
Project Management		\$ 93.00	25.0	\$2,325.00
Project Superintende	ent	\$ 58.00	25.0	\$1,450.00
PPD Construction				\$0.00
Unit Price Contractor	r			\$72,000.00
Bid Contractor				\$0.00
Casework Vendor				\$0.00
Asbestos Abatement	1			\$0.00
UK Communications	3			\$0.00
Owner Purchased Ma	aterial			\$0.00
Roofing Contractor				\$0.00
Carpet				\$0.00
nterior Design Servi	ces	\$ 30.00	0.0	\$0.00
				\$0.00
				\$0.00
				\$0.00
Subtotal Constructio	n			\$75,775.00
Dumpster Charges (*	1% or 0%)		1.0%	\$757.75
Contingency			10%	\$8,104.25

**Total Construction** 

\$84,637.00

#### TOTAL SYSTEM WARRANTY



SERIAL NO. CRFC 7405 DATE OF ISSUE: June 20, 2019

BUILDING OWNER: UNIVERSITY OF KENTUCKY MEDICAL CENTER PHYSICAL PLANT DIVISION

NAME OF BUILDING: UK BOSOMWORTH (HSRB) AND UK MEDICAL WING DOGHOUSE

8303 HSRB RF 501 502 503 504 505 507 508 and 510 8304 HSRB RF 601 602 603 605 511and 101

BUILDING ADDRESS: 1095 VETERANS DR, LEXINGTON, KY

DATE OF COMPLETION OF THE CRFC TOTAL ROOFING SYSTEM: 06/11/2019

DATE OF ACCEPTANCE BY CARLISLE: 06/20/2019

Carlisle Roofing Systems, Inc., (Carlisle) warrants to the Building Owner (Owner) of the above described building, that; subject to the terms, conditions, and limitations stated in this warranty. Carlisle will repair any leak in the CRFC Roofing System installed by a CRFC Authorized Roofing applicator for a period of 10 years commencing with the date of Carlisle's acceptance of the CRFC Roofing System installation. However, in no event shall Carlisle's obligations extend beyond 10.5 years subsequent to the date of substantial completion of the CRFC Roofing System. See below for exact date of warranty expiration.

The CRFC Roofing System is defined as the following CRFC brand materials: coatings, spray polyurethane foam, primers, fabrics, adhesives, sealants, and additives.

#### TERMS, CONDITIONS, LIMITATIONS

- 1. Owner shall provide Carlisle with written notice via letter, fax or email within thirty (30) days of the discovery of any leak in the CRFC Total Roofing System. Owner should send written notice of a leak to Carlisle's Warranty Services Department at the address set forth at the bottom of this warranty. By so notifying Carlisle, the Owner authorizes Carlisle or its designee to investigate the cause of the leak. Should the investigation reveal the cause of the leak to be outside the scope of this Warranty, investigation and repair costs for this service shall be paid by the Owner. Carlisle shall have sole responsibility in determining the repair of the leak/area.
- 2. If, upon inspection, Carlisle determines that the leak is caused by a defect in the CRFC Total Roofing System's materials, or workmanship of the CRFC Authorized Roofing Applicator in installing the same, Owner's remedies and Carlisle's liability shall be limited to Carlisle's repair of the leak.
- 3. This warranty shall not be applicable if, upon Carlisle's inspection, Carlisle determines that any of the following has occurred:
- (a) The CRFC Total Roofing System is damaged by natural disasters, including, but not limited to, lightning, fire, insect infestations, earthquake, tornado, hail, hurricanes, and winds of (3 second) peak gust speeds of 55 mph or higher measured at 10 meters above ground; or
- (b) Loss of integrity of the building envelope and, or structure including, but not limited to partial or complete loss of roof decking, wall siding, windows, doors or other envelope components or from roof damage by wind-blown objects, or:
- (c) The CRFC Total Roofing System is damaged by any intentional or negligent acts, accidents, misuse, abuse, vandalism, civil disobedience, or the like.
- (d) A defect, deterioration or failure of building components, including, but not limited to, existing roofing materials, roof substrate, walls, mortar, HVAC units, non-CRFC brand metal work, etc., occurs and causes a leak, or otherwise damages the CRFC Total Roofing System; or
- (e) Acids, oils, harmful chemicals and the like come in contact with the CRFC Total Roofing System and cause a leak, or otherwise damage the CRFC Total Roofing System.
- (f) The CRFC Total Roofing System encounters leaks or is otherwise damaged by condensation resulting from any condition within the building that may generate moisture.
- (g) The CRFC Roofing System, substrate or building structure is damaged by ponding water as defined in the National Roofing Contractors Association or as the result of plugged drains and / or scuppers.
- 4. This Warranty shall be null and void if any of the following shall occur:
- (a) If, after installation of the CRFC Total Roofing System by a CRFC Authorized Roofing Applicator there are any alterations or repairs made on or through the roof or objects such as, but not limited to, structures, fixtures, solar arrays, wind turbines, roof gardens, utilities or other overburden are placed upon or attached to the roof without first obtaining written authorization from Carlisle; or
- (b) Failure by the Owner to use reasonable care in maintaining the roof, said maintenance to include, but not be limited to, those items listed on CRFC's Care & Maintenance Information sheet which accompanies this Warranty.
- 5. This warranty refers to CRFC product(s) only. Failures of, or caused by, the substrate for the CRFC Roofing System, improper application, flashings, and other components contained in a roofing system, not supplied by CRFC are not covered by this warranty.
- 6. During the term of this Warranty, Carlisle shall have free access to the roof during regular business hours. In addition, it shall be Owner's sole responsibility to remove and re-install at Owner's expense, all obstructions, including, but not limited to, solar arrays, roof gardens, wind turbines, utilities and other overburden from the affected area as determined by Carlisle that would hinder or impede repairs being made in the most expedient and least expensive manner possible. Owner shall be responsible for all costs associated with any loss of power generation in the event the removal of a solar array is required to repair the roofing system.

Rev. 7/11/18



- 7. Carlisle shall have no obligation under this Warranty while any bills for installation, supplies, service, and warranty charges have not been paid in full to the CRFC Authorized Roofing Applicator, Carlisle, or material suppliers.
- 8. Carlisle's failure at any time to enforce any of the terms or conditions stated herein shall not be construed to be a waiver of such provision.
- 9. Carlisle shall not be responsible for the cleanliness or discoloration of CRFC Total Roofing System caused by environmental conditions including, but not limited to, dirt, pollutants or biological agents.
- 10. Carlisle shall have no liability under any theory of law for any claims, repairs, restoration, or other damages including, but not limited to, consequential or incidental damages relating, directly or indirectly, to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in the building or in the air, land, or water serving the building.
- 11. This warranty shall be transferable upon a change in ownership of the building when the owner has completed certain procedures including a transfer fee and an inspection of the Roofing System by a CRFC representative.

This Warranty shall be governed by the laws of the Commonwealth of Pennsylvania, without regard to its conflict of law provisions. In the event of any claim arising out of or relating to this Warranty, the parties agree that reasonable efforts will be made to settle that claim through dialog and negotiation prior to the initiation of any proceeding. If such efforts fail to resolve all outstanding claims, the parties agree to then submit all claims arising out of or related to this Warranty to a mutually agreeable mediator in an effort to resolve the dispute without the necessity of litigation. The parties will bear the costs of such mediation equally. Should the mediation prove unsuccessful, the parties agree that the exclusive venue for all claims arising out of or related to this Warranty shall be in either the Court of Common Pleas of Cumberland County or the United States District Court for the Middle District of Pennsylvania. Each party expressly consents to the jurisdiction and venue of these identified courts.

CARLISLE DOES NOT WARRANT PRODUCTS UTILIZED IN THIS INSTALLATION WHICH IT HAS NOT FURNISHED; AND SPECIFICALLY DISCLAIMS LIABILITY, UNDER ANY THEORY OF LAW, ARISING OUT OF THE INSTALLATION AND PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY CARLISLE OR THE PRIOR EXISTING ROOFING MATERIAL OVER WHICH THE CRFC ROOFING SYSTEM HAS BEEN INSTALLED.

THE REMEDIES STATED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES FOR FAILURE OF THE CRFC TOTAL ROOFING SYSTEM OR ITS COMPONENTS. THERE ARE NO WARRANTIES EITHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHICH EXTEND BEYOND THE FACE HEREOF. CARLISLE SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGE TO THE BUILDING OR ITS CONTENTS UNDER ANY THEORY OF LAW.

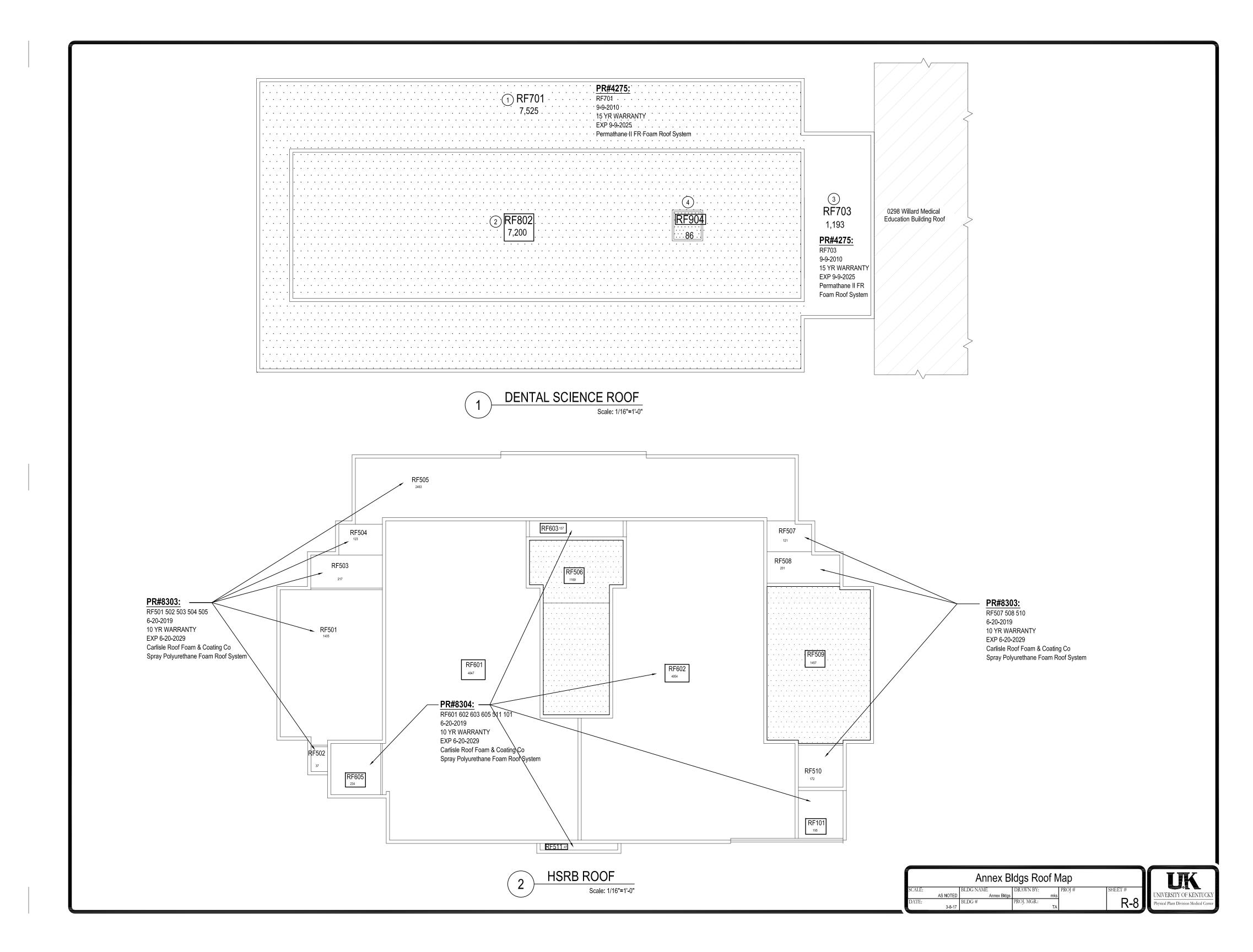
This warranty is effective upon receipt of fully executed copy at the address below including issue number and execution by an authorized representative of CRFC and the Owner.

SERIAL NO. CRFC 7405

This Warranty Expires: 06/19/2029

# Owner Authorized Signature: By: Title: Carlisle Roof Foam and Coatings Authorized Signature: By: Mark J. Long Title: Director, Technical and Warranty Services

Rev. 7/11/18





# CARE AND MAINTENANCE for

# **Accella Roofing Solutions**

## **Roofing Systems**

#### **TABLE OF CONTENTS**

A.	PREVENTATIVE MAINTENANCE			
	1. Gen	eral Care and Maintenance	2	
	SAFETY	AND CAUTION	2	
	2. Peri	odic Inspections	2	
	3. Roo	f Maintenance	3	
	4. Roo	f Cleaning	3	
	5. SPF	Roofing - Repairs	3	
B.	LEAK IN	VESTIGATION	3	
C.	EMERGENCY REPAIRS			
	1. Tem	nporary Wet Surface Emergency Repairs	4	
	2. Dry	Surface Emergency Repairs	4	
D.	PROCED	DURES FOR HANDLING WARRANTED REPAIRS	4	
F.	ROOF A	I TERATION	4	

#### A. PREVENTATIVE MAINTENANCE

#### 1. General Care and Maintenance

The following is a list of general care and maintenance requirements for Accella Roofing Solutions ("Accella") Brand systems. These maintenance items will help attain maximum performance from the roofing system.

- a. Provide proper drainage. Keep the roof surface clean of leaves, twigs, paper or accumulated dirt at drain areas to avoid clogged drains. Ponding of water on the surface of the system will increase the probability of moisture entering the structure in the event of a puncture or cut in the system.
- b. Avoid degrading the roofing system.

Do not expose the roofing system to the following due to possible degradation of the system:

- 1) Liquids containing petroleum products
- 2) Solvents
- 3) Grease used for lubricating roof top units
- 4) Oils (new or old) used for air conditioning or compressor units
- 5) Kitchen wastes or other animal fats
- 6) Chemicals

Catch pans and proper drainage of these pans or other means of protection may be used for system protection. Prolonged exposure to these materials will cause swelling and possible degradation of the system if spills are not removed.

c. Limit foot traffic. Unprotected areas of the roofing system are more susceptible to damage from reoccurring foot traffic. Care must be used to avoid damage to the system.

#### **SAFETY AND CAUTION**

The roofing system may be slippery when wet. Exercise caution when walking on the roof system. Particularly while walking on light colored surfaces since ice or frost build up may not be as visible as it may be on a dark surface. Always exercise care while on a roof and follow a roof safety and fall protection program.

- d. Exercise care with tools and equipment to avoid puncturing the system when it is necessary for workers to be on the roof to service rooftop equipment, e.g., HVAC units, antennas, etc.
  - When servicing units, care should be taken when placing metal doors, lids, pans, or sharp objects on the system surface.
  - When moving units or equipment on roofs, avoid overloading and system damage by installing smooth plywood over the system prior to moving the equipment.
- e. Avoid damaging the system if the removal of snow is necessary. Use plastic shovels and pay particular attention when working around curbs or other areas where wall flashing can be damaged. Snow blowers and shovels with sharp edges must not be used.
- f. Remove all debris (such as, glass, bolts, nails, screws, metal shavings, etc.) and any other material that may promote punctures or cuts to the system.
- g. Remove all spills of material, which may degrade the system (such as solvent based materials, oil based paint, etc.)

#### 2. Periodic Inspections

The building owner should establish a periodic inspection program. Roof inspections should be conducted by qualified personnel properly trained in safety, beginning when the roof is completed and continuing at least twice a year thereafter, preferably, in the spring and the fall.

The inspection should concentrate on "high risk" areas such as roof hatches, drains and around all rooftop equipment, as well as a general inspection of the entire roofing system.

Periodic inspections should also include the examination of the roof deck from the underside for evidence of leaks, deteriorated decking, structural cracks, or movement and other deficiencies. Parapets and edgings should also be examined for evidence of cracking, deterioration and moisture infiltration.

In addition to the scheduled semi-annual inspections, roof inspections should also be conducted whenever any of the following conditions occur:

- Exposure of the roof to severe weather conditions, such as strong winds, hail or continuous heavy rainfall.
- b. Examine the roof for severely ponded conditions, debris, and any other damage to the building components that may allow moisture to infiltrate. The system should also be examined in areas where damages have been identified for punctures, tears or loose coating.
- c. After repair or replacement of rooftop equipment, and at any other time when the roof may become exposed to activities of other trades where damages may occur.
- d. Examine the roof for spills, debris, sharp objects, punctures, or possible delamination on adhered roofing systems caused by constant foot traffic.

#### 3. Roof Maintenance

Proper roof maintenance is required on all roof systems. Building owners may wish to consider a roof maintenance agreement with your installer. Roof Maintenance Agreements will extend the life of your roof, and may save you money and time.

#### 4. Roof Cleaning

Some roofs may require cleaning for aesthetic concerns or if the roof is in a very dirty environment. Extreme care should be exercised to prevent damage to the roof. Most often power washing with clean water will remove most accumulated dirt, a soft broom may be used to assist in the cleaning. Use a large volume of water and as low a pressure setting as possible to gently perform the cleaning. Removal of other contaminants may require the use of a safe and biodegradable cleaning agent. Algae growth may require the use of an approved solution, such as a mild chlorine solution, diluted with water.

#### 5. SPF Roofing - Repairs

Minor cuts or mechanical damage to Sprayed Polyurethane Foam (SPF) may be repaired with approved urethane caulks, or in the case of silicone coating use only approved silicone caulks. Clean area to be repaired and remove exposed foam. Fill repair area with approved caulk and tool to convex surface extending a minimum of 1 inch beyond damaged area. Do not use clear or translucent caulks. A qualified contractor should make extensive repairs.

#### B. LEAK INVESTIGATION

- On metal decks, it is important to identify the direction of the deck flutes and deck slope. Moisture may
  infiltrate through the roofing system and migrate in the lower flutes of the deck and leak inside the building in
  low areas.
- 2. On concrete decks, or on projects where the existing roofing material is left in place, some leaks may be the result of moisture entrapment at the time of the original installation.
- On poorly insulated roofing assemblies, some leaks may be the result of condensation; therefore, it is important to determine the leak location and frequency.
- 4. Begin leak investigations by conducting a thorough, visual inspection of the general location on the roof where leaks have been detected inside the building.
  - a. Inspect field splices, areas of ponded water (if the roof is dry at the time of investigation, areas of ponded water can be identified by accumulated residue on the system).
  - b. Examine lower areas of the roof for moisture beneath the system (soft insulation can be detected when walking on the system).
  - c. Check areas around mechanical rooftop equipment, drains, gravel stops, curbs, expansion joints, pipes, etc. to identify cuts, punctures or damaged field splices.
  - d. Explore the condition of metal flashing (i.e., edging, coping, expansion joint covers, etc.) for improperly sealed joints.

5. When a visible source of the leak has not been identified, wet the system at the anticipated leak area with water. Use a squeegee to remove the excess water. As the system dries, small cuts or tears will remain wet.

**Note**: On Ballasted Roofing Systems, if leaks are a result of punctures or small cuts in the system, it will be necessary to remove the ballast prior to further investigation.

#### C. EMERGENCY REPAIRS

Only qualified workers should perform repairs. The building owner may perform emergency repairs required to provide immediate protection from water infiltration; however, an Accella Authorized Roofing Applicator must complete permanent repairs when weather conditions permit.

Use sealant or any good grade caulk to make temporary repairs to systems. Notify Accella of this action in writing.

#### 1. Temporary Wet Surface Emergency Repairs

- a. Clean the system of the dirt film, which may have accumulated on the surface of the system.
- b. Clean the system surface around the cut or tear with a commercial cleaner.
- c. Rinse the area with clean water. Remove as much water as possible and try to dry as much as possible.
- d. Apply Accella's Poly-Sil silicone sealant to the cut area.

#### 2. Dry Surface Emergency Repairs

- a. Clean the system surface around the cut or tear with a commercial cleaner.
- b. Rinse the area with clean water and allow it to dry.
- c. Apply Accella's Poly-Sil silicone sealant to the cut area.
- Permanent repairs must be completed by an Accella Authorized Roofing Applicator. Accella must be contacted by the building owner or through the Accella Authorized Roofing Applicator to coordinate permanent repairs.

#### D. PROCEDURES FOR HANDLING WARRANTED REPAIRS

1. When repairs are necessary on warranted roof projects, Accella relies on Authorized Roofing Applicators to perform those repairs. With few exceptions, Accella requests an estimate for the repair work from the original Authorized Roofing Applicator who installed the project.

#### E. ROOF ALTERATION

- 1. To assure the continuation of the Warranty, any modifications or alterations to the roofing system (addition of units, pipes, satellite dishes, etc.) must be communicated to Accella prior to proceeding.
- 2. The proposed modification or alteration details will be reviewed by Accella to determine compliance with Accella Roofing System specifications.
- 3. Coordinate the installation with the Accella Authorized Roofing Applicator so the modification / alteration will be in accordance with Accella Roofing System specifications and details.

Copyright 2018



P.O. Box 7000 Carlisle, PA 17013 (800) 233-0551



# CARE AND MAINTENANCE for

# **Accella Roofing Solutions**

## **Roofing Systems**

#### **TABLE OF CONTENTS**

A.	PREVENTATIVE MAINTENANCE			
	1. Gen	eral Care and Maintenance	2	
	SAFETY	AND CAUTION	2	
	2. Peri	odic Inspections	2	
	3. Roo	f Maintenance	3	
	4. Roo	f Cleaning	3	
	5. SPF	Roofing - Repairs	3	
B.	LEAK IN	VESTIGATION	3	
C.	EMERGENCY REPAIRS			
	1. Tem	nporary Wet Surface Emergency Repairs	4	
	2. Dry	Surface Emergency Repairs	4	
D.	PROCED	DURES FOR HANDLING WARRANTED REPAIRS	4	
F.	ROOF A	I TERATION	4	

#### A. PREVENTATIVE MAINTENANCE

#### 1. General Care and Maintenance

The following is a list of general care and maintenance requirements for Accella Roofing Solutions ("Accella") Brand systems. These maintenance items will help attain maximum performance from the roofing system.

- a. Provide proper drainage. Keep the roof surface clean of leaves, twigs, paper or accumulated dirt at drain areas to avoid clogged drains. Ponding of water on the surface of the system will increase the probability of moisture entering the structure in the event of a puncture or cut in the system.
- b. Avoid degrading the roofing system.

Do not expose the roofing system to the following due to possible degradation of the system:

- 1) Liquids containing petroleum products
- 2) Solvents
- 3) Grease used for lubricating roof top units
- 4) Oils (new or old) used for air conditioning or compressor units
- 5) Kitchen wastes or other animal fats
- 6) Chemicals

Catch pans and proper drainage of these pans or other means of protection may be used for system protection. Prolonged exposure to these materials will cause swelling and possible degradation of the system if spills are not removed.

c. Limit foot traffic. Unprotected areas of the roofing system are more susceptible to damage from reoccurring foot traffic. Care must be used to avoid damage to the system.

#### **SAFETY AND CAUTION**

The roofing system may be slippery when wet. Exercise caution when walking on the roof system. Particularly while walking on light colored surfaces since ice or frost build up may not be as visible as it may be on a dark surface. Always exercise care while on a roof and follow a roof safety and fall protection program.

- d. Exercise care with tools and equipment to avoid puncturing the system when it is necessary for workers to be on the roof to service rooftop equipment, e.g., HVAC units, antennas, etc.
  - When servicing units, care should be taken when placing metal doors, lids, pans, or sharp objects on the system surface.
  - When moving units or equipment on roofs, avoid overloading and system damage by installing smooth plywood over the system prior to moving the equipment.
- e. Avoid damaging the system if the removal of snow is necessary. Use plastic shovels and pay particular attention when working around curbs or other areas where wall flashing can be damaged. Snow blowers and shovels with sharp edges must not be used.
- f. Remove all debris (such as, glass, bolts, nails, screws, metal shavings, etc.) and any other material that may promote punctures or cuts to the system.
- g. Remove all spills of material, which may degrade the system (such as solvent based materials, oil based paint, etc.)

#### 2. Periodic Inspections

The building owner should establish a periodic inspection program. Roof inspections should be conducted by qualified personnel properly trained in safety, beginning when the roof is completed and continuing at least twice a year thereafter, preferably, in the spring and the fall.

The inspection should concentrate on "high risk" areas such as roof hatches, drains and around all rooftop equipment, as well as a general inspection of the entire roofing system.

Periodic inspections should also include the examination of the roof deck from the underside for evidence of leaks, deteriorated decking, structural cracks, or movement and other deficiencies. Parapets and edgings should also be examined for evidence of cracking, deterioration and moisture infiltration.

In addition to the scheduled semi-annual inspections, roof inspections should also be conducted whenever any of the following conditions occur:

- Exposure of the roof to severe weather conditions, such as strong winds, hail or continuous heavy rainfall.
- b. Examine the roof for severely ponded conditions, debris, and any other damage to the building components that may allow moisture to infiltrate. The system should also be examined in areas where damages have been identified for punctures, tears or loose coating.
- c. After repair or replacement of rooftop equipment, and at any other time when the roof may become exposed to activities of other trades where damages may occur.
- d. Examine the roof for spills, debris, sharp objects, punctures, or possible delamination on adhered roofing systems caused by constant foot traffic.

#### 3. Roof Maintenance

Proper roof maintenance is required on all roof systems. Building owners may wish to consider a roof maintenance agreement with your installer. Roof Maintenance Agreements will extend the life of your roof, and may save you money and time.

#### 4. Roof Cleaning

Some roofs may require cleaning for aesthetic concerns or if the roof is in a very dirty environment. Extreme care should be exercised to prevent damage to the roof. Most often power washing with clean water will remove most accumulated dirt, a soft broom may be used to assist in the cleaning. Use a large volume of water and as low a pressure setting as possible to gently perform the cleaning. Removal of other contaminants may require the use of a safe and biodegradable cleaning agent. Algae growth may require the use of an approved solution, such as a mild chlorine solution, diluted with water.

#### 5. SPF Roofing - Repairs

Minor cuts or mechanical damage to Sprayed Polyurethane Foam (SPF) may be repaired with approved urethane caulks, or in the case of silicone coating use only approved silicone caulks. Clean area to be repaired and remove exposed foam. Fill repair area with approved caulk and tool to convex surface extending a minimum of 1 inch beyond damaged area. Do not use clear or translucent caulks. A qualified contractor should make extensive repairs.

#### B. LEAK INVESTIGATION

- On metal decks, it is important to identify the direction of the deck flutes and deck slope. Moisture may
  infiltrate through the roofing system and migrate in the lower flutes of the deck and leak inside the building in
  low areas.
- 2. On concrete decks, or on projects where the existing roofing material is left in place, some leaks may be the result of moisture entrapment at the time of the original installation.
- On poorly insulated roofing assemblies, some leaks may be the result of condensation; therefore, it is important to determine the leak location and frequency.
- 4. Begin leak investigations by conducting a thorough, visual inspection of the general location on the roof where leaks have been detected inside the building.
  - a. Inspect field splices, areas of ponded water (if the roof is dry at the time of investigation, areas of ponded water can be identified by accumulated residue on the system).
  - b. Examine lower areas of the roof for moisture beneath the system (soft insulation can be detected when walking on the system).
  - c. Check areas around mechanical rooftop equipment, drains, gravel stops, curbs, expansion joints, pipes, etc. to identify cuts, punctures or damaged field splices.
  - d. Explore the condition of metal flashing (i.e., edging, coping, expansion joint covers, etc.) for improperly sealed joints.

5. When a visible source of the leak has not been identified, wet the system at the anticipated leak area with water. Use a squeegee to remove the excess water. As the system dries, small cuts or tears will remain wet.

**Note**: On Ballasted Roofing Systems, if leaks are a result of punctures or small cuts in the system, it will be necessary to remove the ballast prior to further investigation.

#### C. EMERGENCY REPAIRS

Only qualified workers should perform repairs. The building owner may perform emergency repairs required to provide immediate protection from water infiltration; however, an Accella Authorized Roofing Applicator must complete permanent repairs when weather conditions permit.

Use sealant or any good grade caulk to make temporary repairs to systems. Notify Accella of this action in writing.

#### 1. Temporary Wet Surface Emergency Repairs

- a. Clean the system of the dirt film, which may have accumulated on the surface of the system.
- b. Clean the system surface around the cut or tear with a commercial cleaner.
- c. Rinse the area with clean water. Remove as much water as possible and try to dry as much as possible.
- d. Apply Accella's Poly-Sil silicone sealant to the cut area.

#### 2. Dry Surface Emergency Repairs

- a. Clean the system surface around the cut or tear with a commercial cleaner.
- b. Rinse the area with clean water and allow it to dry.
- c. Apply Accella's Poly-Sil silicone sealant to the cut area.
- Permanent repairs must be completed by an Accella Authorized Roofing Applicator. Accella must be contacted by the building owner or through the Accella Authorized Roofing Applicator to coordinate permanent repairs.

#### D. PROCEDURES FOR HANDLING WARRANTED REPAIRS

1. When repairs are necessary on warranted roof projects, Accella relies on Authorized Roofing Applicators to perform those repairs. With few exceptions, Accella requests an estimate for the repair work from the original Authorized Roofing Applicator who installed the project.

#### E. ROOF ALTERATION

- 1. To assure the continuation of the Warranty, any modifications or alterations to the roofing system (addition of units, pipes, satellite dishes, etc.) must be communicated to Accella prior to proceeding.
- 2. The proposed modification or alteration details will be reviewed by Accella to determine compliance with Accella Roofing System specifications.
- 3. Coordinate the installation with the Accella Authorized Roofing Applicator so the modification / alteration will be in accordance with Accella Roofing System specifications and details.

Copyright 2018



P.O. Box 7000 Carlisle, PA 17013 (800) 233-0551

