



### **TPO Retrofit Proposal**

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1750 N. Collins Blvd. Ste. 106 Richardson, Texas 75080

Company Name:	Pillar Roofing Commercial Services		Date:
<b>Contact Person:</b>	Wayne Dishman Commercial Service Manager		Cell #: 214-293-2904
Email Address:			
Project Address:	1750 N. Collins Blvd.	Building #:	
City, State & Zip:	Richardson, Texas 75080		

#### **Inspection Report:**

The photos directly below show both of these roof systems were inspected on **Nov. 15th 2022**. On that day both of these roof systems had a lot of water ponding on the surface and we were not able to get a close look at the drainage areas or take test core cuts.









The photos below show: On our 2nd inspection on Nov. 22th 2022 it was much drier and we were able to take our test core cuts.







**The photos directly above show:** both of these roof systems have a jipson lightweight construction material as a base substrate. You can see the white material in the photos, it looks like chalk and has heavy duty wire running through it for structural integrity. This means we can not use hardware to attach the the new roof system, it must be fully adhered with low rise foam adhesives.









**The photos above show:** The parapet wall area is stretching out of place and separating, leaving large openings for rain to enter the interior areas. The perimeter areas are full of debris and granules that have separated from the modified bitumen roof material. It's this debris that is causing most of the drainage issues.

The photos below show: The asphalt materials that were used to seal the parapet wall areas are shredding apart and has become porous allowing rain to seep behind the parapet wall and eventually into the interior areas.



The photos below show: Problems that will need to be addressed prior to the start of the TPO Retrofit membrane installation project.

**Problem 1:** the ponding water on the modified bitumen section, the large A/C unit has a persistent leak that is part of the source.



**Problem 2:** the drains on both sections of this roof system are clogged and needs a plumber to get them operational ASAP. These backed up roof drains allow water to hang around and saturate through the aged roofing material seams of the roofing



On the Tar & Gravel roof the drains are clogged with debris and gravel that has gotten past the drain caps. There are very few drains on these roof systems and most are clogged with debris and not allowing rain to move off the roof.



Problem 3: the gutter system is clogged as well and will need to be flushed out and cleaned of all debris so rain can drain off.

Some scupper downspout drains are also clogged. These overflow drains are where the rain water is supposed to run down through and then off property to the street.



Phase 1

Area

#### Scope Of Work: Phase 1

#### **Roof Surface preparation:**

- Vacuum gravel off the BUR (built-up roof) surface, and then spud the rough surface as needed, haul away daily.
- All project debris will be removed from the roof on the backside location away from front entrance.
- Dumpsters will be located near by to catch all project debris which will be hauled away once dumpsters are full.

#### **Project Preparation:**

- Set-up staging area with tools and equipment, secure roof access areas.
- Load the roof with materials needed for the Phase 1 portion of the project, the BUR installation.

#### A/C Units & Roof Fixture Details:

- Custom cut and install cover insulation board around all A/C unit equipment and A/C curbs as needed.
- Fully adhere ISO insulation around all penetrations and roof flashings.

#### Carlisle 60 Mil TPO Membrane:

- Fully adhere the Carlisle 60-mil TPO with low rise foam bonding agents to the cover insulation board.
- Clean, overlap seams, and hot-air heat weld side and end laps.
- Install rain reverting crickets and saddles to contour roof slope for proper water drainage, toward roof drain locations.
- All TPO seams will overlap approx. 6" on center at every crossing and connection.
- Apply lap sealant to seal cut edges of sheet membrane and verify field strength of seams twice daily.

#### **TPO Drain Details:**

• The new TPO membrane will need to be retrofitted around existing drain areas to allow maximum water flow off the roof.

#### **Metal Flashing Details:**

- TPO will be fully adhered up and over the A/C curb platforms and approx. 12" up the elevator building roof-to-wall areas.
- Custom fabricated term-bar will be mechanically attached around A/C platforms and the roof-to-wall areas, as needed.

#### **TPO Perimeter Details:**

- The photos below show the steps needed to reseal the parapet walls around the entire perimeter areas with this TPO termination detail.
- Step 1: Install plywood with small shims creating a sight slope on the top area of the parapet wall; this will allow for run off.
- Step 2: Adhere shim and plywood into place along the top and in the counters of the parapet wall using low rise foam adhesives.
- Step 3: Mechanically attach the field TPO membrane to the side of the parapet wall as shown in the photo below.
- Step 4: Adhere the TPO membrane to the sides of the parapet wall and the plywood around the entire perimeter areas.
- Step 5: Form fit the TPO membrane sheet to the parapet as well as up and over the plywood, adhere in to place as needed.
- Step 6: Mechanically attach a 3 piece metal flashing assembly to the outside parapet walls, this is what will be seen from the ground.



This parapet wall detail is typical for all perimeter TPO membrane termination points of phase 1 & 2.

#### Scope Of Work: Phase 2

#### **Roof Surface preparation:**

- Remove all loose granules and debris, remove all unused equipment, remove any loose material as needed, haul away daily.
- All project debris will be removed from the roof on the backside location away from front entrance.
- Dumpsters will be located on the roofs edge to catch all project debris which will be hauled away once dumpsters are full.

#### **Install ISO Cover Board:**

- Cover board will go down over the existing rough roof material and will serve as the new smooth surface for the TPO membrane.
- Fully adhere 4 x 8' 1/2" inch thick high density sheets of base cover board to the existing modified bitumen material.

#### A/C Units & Roof Fixture Details:

- Custom cut and install cover insulation board around all A/C unit equipment and A/C curbs as needed.
- Fully adhere ISO insulation around all penetrations and roof flashings.

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#### **Safety Work Pad Details:**

 Our TPO technicians will be installing yellow safety walk pads around A/C units with a tack welding process. These work pads will provide protection for the TPO membrane on areas of the roof that need frequent maintenance or A/C service.

This Safety Work Pad detail is typical for phase 1 & 2.

#### **TPO Roof System Maintenance:**

- Rainwater flows faster off a TPO Roofing System so all drain areas must be cleared and checked twice a year.
- Debris needs to be regularly removed from under A/C units, gas lines, and all other fixtures and utility areas.
- Seam testing will be done around major TPO juncture and overlapping detail areas.
- Examine water-flow and drainage efficiency around the entire TPO Roof System.
- Examine all parapet wall details to make sure termination areas are secure and dry.



Phase 1

Area

Phase 2

Area

**Material &** 

**Equipment** 

Work Vehicle

**Parking** 

Mobile Restroom

#### **Project Logistics:**

#### **Project Staging:**

 Our team will park their work vehicles and equipment along the side area of the project as shown on our diagram.

#### Set-Up and Staging Area

 Our project staging area will be positioned next to the back stairs roof access area as shown on our diagram.

#### **Mobile Restroom**

 Our team will have it's own restroom facilities for the duration of this project. It will be located in the back of the building as shown on our diagram.

#### **Project Phases:**

- The transformation from the old roof to the new TPO roof system will take place in 2 phases as shown on our diagram.
- Materials and equipment will be placed on the Phase 2 location during the installation process on phase 1.



Track

#### Sky Track Roof Access & Loading:

Our sky track will be able to load materials and equipment from the location shown on our diagram. Due to
powerlines and other obstacles this area will need to be used for a short time to load roof only. The sky track will be
moved to the back area once the roof is loaded.

#### **Project Duration:**

- Our team will have all the equipment and materials on site as needed; this will keep the project on schedule.
- The modified bitumen removal and TPO membrane installation including the lower building portion of this should take approx. three to four weeks depending on the weather conditions.
- All project work will take place during hours allowed by the Bar W Meat Company Management and the city of Fort Worth..

#### **Quality Assurance:**

- 20 year Carlisle TPO Membrane Roof System Warranty will be issued upon completion.
- 10 year Pillar Roofing Workmanship Warranty will be issued apon completion..
- A full inspection will be done by Pillar Roofing application supervisor, project manager, and authorized property manager.
- Pillar Roofing shall be responsible for the first 24 months of service maintenance on your new TPO Roof System.

#### **Project Cost & Payments:**

Price includes:

material, labor, equipment, and warranties Project Cost:

#### NOTE:

Due to extremely unprecedented material shortages and fluctuating prices from manufacturers of roofing products, this quote is valid for thirty days. After thirty days the price for materials will be adjusted based upon Fair market value at the current time. Submittal Date: 12/09/22

# Proposal Prepared By: Pillar Roofing Project Manager: Wayne Dishman Cell #: 210-632-4201 Pillar Roofing Production Manager: Steve Monahan Cell #: 972-742-6040 Authorize Signature: Date:





# COMMERCIAL & RESIDENTIAL

## LICENSED ROOFING CONTRACTOR

# Steven Monahan, CRRL

has successfully met all the requirements and conditions to become licensed by the Roofing Contractors Association of Texas

LICENSE NUMBER: 03-0333

LICENSE VALID THROUGH: 10/31/2023

ROOFING COMPANY: Pillar Roofing Commercial Services