

City of Coppell – Cozby Library

ASSESSMENT

DATE OF SITE VISIT 7/30/25

INTRODUCTION

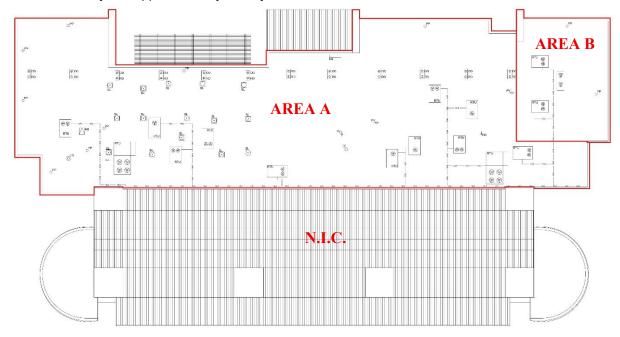
DRYTEC made a site visit to provide a roof assessment for this facility located at 177 N Heartz Rd, Coppell, TX 75019. This assessment was based on visual observations made during the visit. No existing drawings were provided. No formal or informal testing such as water penetration testing was conducted as a part of this assessment.

The building has approximately 35,795 total square feet of roof area and is single-story. The two types of roof systems are Thermoplastic Polyolefin (TPO) and standing seam. The existing standing seam roof system was not included in the assessment. For this assessment, the 20,240 square feet of TPO roof areas identified below as 'Area A' and 'Area B' were assessed. These two areas are reported to have significant leaks.

Aerial View of City of Coppell – Cozby Library



Roof Plan of City of Coppell - Cozby Library



Roof Access

- Roof Area A is accessed by a roof hatch.
- Roof Area B is accessed from Area A.

Drainage

Roof Area A is drained via roof drains and accompanying overflow drains. Roof Area B is drained via roof drain and accompanying overflow drain.



SUMMARY

ROOF SYSTEM - Roof Areas A and B:

The existing TPO roof system over metal deck has numerous issues with the following deficiencies:

- Remedial repairs to membrane laps throughout roof system, many of which have failed.
- Liquid flashing failing at numerous locations.
- Ponding water throughout the roof system.
- Remedial repairs around pipe boots.

WARRANTY

DRYTEC was informed that the roof had a 10-year warranty when the roof was installed 11-years ago by Saddleback Roofing. DRYTEC contacted Johns-Manville to inquire of the exact date of the warranty. Johns-Manville reported that they had no record of any warranty having been issued. DRYTEC also contacted Hidell Architects, who provided the attached warranty from their records. This warranty appears to have been issued September 30, 2016 and expires September 30, 2036.

RECOMMENDATIONS

Due to the condition of the existing roofing system and extensive leak history, DRYTEC recommends a full replacement of the existing roof system and flashings with a new polyvinyl chloride (PVC) roofing system, complying with manufacturer standards. Any lightly rusted metal deck is to be wire brushed to remove any scale and painted with a rust inhibitive primer. Any severely rusted metal deck is to be replaced with matching profile, 22 gage metal deck. Due to extensive leak history, an overlay system is not recommended as the deck should be inspected prior to roof replacement.

Existing Roof System:

Due to the extensive amount of mechanical equipment on this roof, DRYTEC recommends a two-ply modified bitumen roof system, which is more durable under the amount of foot traffic necessary to maintain the equipment on this roof system. Therefore, DRYTEC recommends replacing 20,240 square feet of the existing TPO roof system with a 2-ply modified bitumen roof assembly installed over cover board over flat and tapered insulation with a minimum of 4.5 inches of insulation to meet Energy Code R-Value of 25. This includes raising and reworking equipment curbs, counter flashings, electrical conduit, gas and condensate piping, refrigerant supply and return lines, and control wiring to accommodate the additional thickness of the new roof system flashing heights. Our opinion of probable costs for this option is \$588,000. If the City of Coppell elects to use a single-ply roof assembly, this assembly would be PVC membrane over cover board over flat and tapered insulation with a minimum of 4.5 inches of insulation to meet Energy Code R-Value of 25. This again includes raising and reworking equipment curbs, counter flashings, electrical conduit, gas and condensate piping, refrigerant supply and return lines, and control wiring to accommodate the additional thickness of the new roof system flashing heights. Our opinion of probable costs for this option is \$378,000.

Estimate of probable cost for restoration (wire brush and paint) of any rusted deck (Estimated at 10% of roof area.) \$15,360.

Estimate of probable cost for replacement of any severely rusted deck (Estimated at 5% of the roof area) \$18,900.

Total Cost for 2-ply modified bitumen is \$622,260 plus contingency of \$93,339 (15%) = \$715,599 Total Cost for PVC is \$412,260 plus contingency of \$61,839 (15%) = \$474,099

ROOF PHOTOS

OVERVIEW OF ROOF AREAS



Photo 1 – Overview of Roof Area A



Photo 2 – Overview of Roof Area B.

TYPICAL DEFICIENCIES



Photo 3



Photo 4



Photo 5

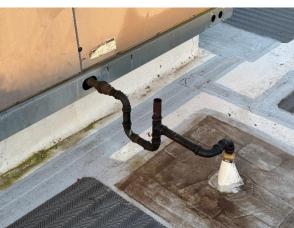


Photo 6





Photo 7 Photo 8





Photo 9 Photo 10





Photo 11 Photo 12







Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21



Photo 22 – Protection over server.

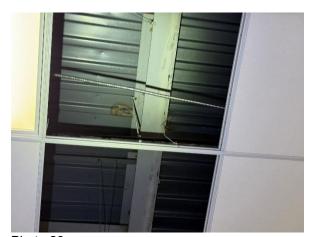


Photo 23

END OF REPORT