

Howard Hanna
Hudson Office



116 North Main Street

Vertical Runner

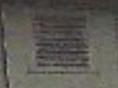




JEWELRY ART



Vertical Runner
Adventure Starts Here





ROOFING · SHEET-METAL · RESTORATION

"PROTECTING YOUR INVESTMENT"

18-120

March 13, 2018

Jewelry Fine Art
116 North Main Street
Hudson, OH 44236
330.650.9011

Job Site:

116 North Main Street
Hudson, OH 44236

PROPOSAL

Thank you for your interest in the services and systems offered by our Company. The following proposal is for the designated roof retrofit per your request and as specified below.

DURO-TUFF ROOF:

- A. Mechanically fasten Duro-Guard over entire field area of roof to create a new, smooth surface.
- B. Upon installation of Duro-Guard, a white .050 Duro-Tuff single ply roofing membrane will be mechanically fastened according to the manufacturer's specifications. This is to ensure the specified warranty will be issued upon completion.
- C. New flashing assemblies will be engineered and installed to all penetrations, drains, scuppers, roof top units, etc. in accordance to manufacturer's specifications.
- D. One-way vents will be installed every 1,000 sq/ft throughout entire new Duro-Tuff roofing membrane system in accordance to manufacturer's specifications.
- E. New compression metal/termination bar will be manufactured and installed in accordance to manufacturer's specifications.
- F. Clean and remove any job related debris.

Note: A fifteen (15) year NDL warranty on all labor and material will be given upon final payment and inspection. Contractor will make annual inspections at no additional charge for the duration of warranty; however, Owner must contact Contractor to make inspections at a time that is mutually convenient. Should any additional work be performed, there will be an extra charge over and above this estimate. 

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P: 888.588.5524 F: 888.588.1946
www.techcorpinc.net

cc

Thomas Joseph

Roof components will not be visible from the street or the parking level.

DURO-TUFF® 50-MIL MEMBRANE

Advantages:

Duro-Last® Duro-Tuff® 50-Mil (DT50) membrane is an excellent choice for low-slope roof projects requiring a long lasting, energy efficient roofing membrane. A complete line of custom prefabricated accessories is available for the DT50 membrane.

Description:

Duro-Tuff membrane incorporates a weft-inserted, knitted scrim within PVC films to provide exceptional strength and waterproofing.

Duro-Tuff membranes must not be used with Duro-Last EV membranes.

PVC Film - Proprietary thermoplastic PVC formulation of resins, plasticizers, stabilizers, biocides, flame retardants, and U.V. absorbents.

- PVC film above weft-inserted scrim – 26 mil

Weft-Inserted Scrim - An 18 x 9 polyester fabric construction with weft insertion, composed of 840 x 1000 denier threads, provides superior tear and puncture resistance. The polyester thread is treated to prevent wicking.

Total Thickness – 50 mil, nominal.

Weight – 0.28 lb. per square foot.

Color – Top surface: white. Bottom surface: light gray.

R-Value – 0.1 ft²·°F·hr/Btu.

Packaging – DT50 is supplied in the roll sizes shown below. A full pallet contains ten rolls.

Roll Dimensions:

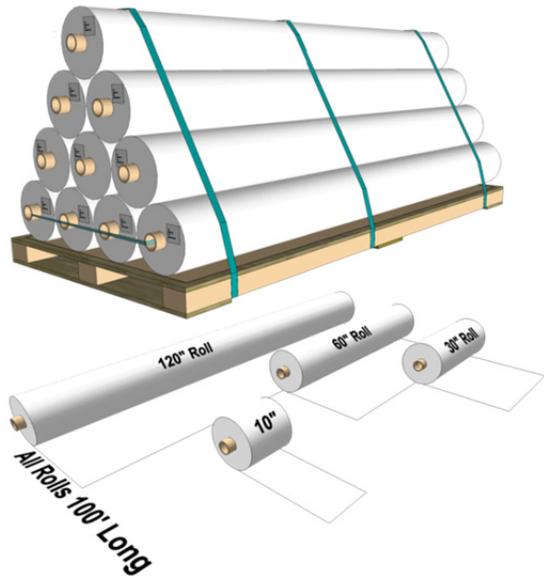
Dimensions	Estimated Coverage		Roll Weight
	6" Overlap ¹	4" Overlap ²	
120 in. x 100 ft.	950 sq. ft.	967 sq. ft.	280 lb.
60 in. x 100 ft.	450 sq. ft.	467 sq. ft.	140 lb.
30 in. x 100 ft.	200 sq. ft.	217 sq. ft.	70 lb.
10 in. x 100 ft.	Stripping		24 lb.

¹ 6-inch overlap and use of Duro-Last Poly or Cleat Plates®

² 4-inch overlap and use of Duro-Last Oval Metal Plates

Overlap Line – A blue line, 6 inches from one edge of the sheet, is factory applied to the top of the sheet to assist in maintaining proper overlap between sheets.

Seam Plate and Fastener Placement Guides – “X”s are placed at 6-inch intervals along one edge of the sheet to assist in maintaining proper spacing between fasteners. Install fasteners so that the outside edge of the seam plate is flush with the edge of the sheet.



“T-Lap” Patches – A patch, with rounded corners, is required at all lap areas where 3 or more layers of membrane intersect (“T-Lap”). The minimum size of the patch is 4 x 4 inches or 4-inch diameter. Patches can be made of either DT or DL membrane of any thickness. Refer to Detail Drawing DT1066.

Energy Efficiency:

White DT50 membrane is an excellent product for complying with California Title 24 and other energy efficiency programs requiring the use of a highly reflective roof membrane.

Cool Roof Rating Council (CRRC)

	CRRC ID	Solar Reflectance		Thermal Emittance		Solar Reflective Index (SRI)	
		Initial	3-yr	Initial	3-yr	Initial	3-yr
White	0610-0008	0.85	0.73	0.89	0.88	108	90

Warranty:

The following warranties are available for projects utilizing DT50 membrane. Contact Duro-Last for warranty details. **Consequential damage coverage is not available for Duro-Tuff installations.**

Available Warranties	
Supreme	Not applicable for this product
Ultra	15-YR High Wind 20-YR High Wind
Basic	15-YR NDL 20-YR NDL
Residential	15-YR Material Only 20-YR Material Only

Codes and Standards:

Underwriters Laboratories (US & Canada), FM Approvals, Canadian Construction Materials Centre (CCMC 14012-L), State of Florida, Miami-Dade County, Texas Department of Insurance.

Storage:

Store rolls lengthwise on pallets. Use tarps to keep rolls dry.

Membrane Attachment:

Mechanically Fastened – DT50 membrane may be mechanically attached to a variety of roof deck and wall materials. An appropriate slip sheet or cover board may be required. Refer to the Roll Good Mechanically Fastened System Specification for system requirements.

Duro-Bond® System – The Duro-Bond system (induction weld) may be used to attach DT50 membrane. Refer to the Duro-Last Duro-Bond System Specification for system requirements.

Adhered – DT50 membrane may be adhered to a variety of properly prepared roof decks, walls, cover boards and insulations. Refer to the Duro-Last Adhered Systems Specification for system requirements.

Physical Properties:

DT50 membrane has been subjected to the tests required by ASTM D4434 “Standard Specification for Poly (Vinyl Chloride) Sheet Roofing” and has been classified as a Type III, internally reinforced sheet. The results of each test are listed below. ASTM’s Overall Thickness requirements for the membrane are plus or minus 10% (nominal) of the listed Typical Value.

Physical Property	Test Method	ASTM D4434 Requirement	Result	Typical Value
Overall Thickness	ASTM D751	≥ 0.045 and ≤ 0.055 in. (≥ 45 and ≤ 55 mil)	PASS	0.050 in. (50 mil), nominal
Thickness Over Scrim	ASTM D7635	≥ 0.016 in.	PASS	0.026 in. (26 mil)
Breaking Strength ¹	ASTM D751 Grab Method	≥ 200 lbf./in.	PASS	423 x 278 lbf./in.
Elongation ¹	ASTM D751 Grab Method	≥ 15%	PASS	31% x 30%
Seam Strength	ASTM D751 Grab Method	≥ 317 lbf. (75% of Breaking Strength.)	PASS	423 lbf.
Tear Strength ¹	ASTM D751 Procedure B	≥ 45 lbf.	PASS	90 x 143 lbf.
Low Temp. Bend	ASTM D2136	Must pass at -40° F.	PASS	PASS
Heat Aging	ASTM D3045	Conditioned for 56 days in oven maintained at 176° F.	PASS	PASS
Accelerated Weathering	ASTM G154 (Formerly G53)	5,000 hours total test time. Irradiance level of 0.68 W/m2-nm. Cycle: 8 hours at 145° F, 4 hours condensation at 122° F.	PASS	PASS
Dimensional Stability ¹	ASTM D1204	Conditioned for 6 hours in oven maintained at 176° F. Allowable change: ≤ 0.5%	PASS	0.20% x 0.10%
Water Absorption	ASTM D570	Immersed in water at 158° F for 168 hours. Allowable weight change: ≤ 3%	PASS	2.60%
Static Puncture	ASTM D5602	≥ 33 lbf.	PASS	≥ 33 lbf.
Dynamic Puncture	ASTM D5635	≥ 14.7 ft-lbf. (20 J)	PASS	≥ 14.7 ft-lbf. (20 J)

¹ Typical values are shown for both machine and cross machine directions. The machine direction results are listed first.

