

## **Product Evaluation**

RC152| 0415

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** RC-152 **Effective Date:** April 1, 2015

**Re-evaluation Date:** April 2016

**Product Name:** TARCO Modified Bitumen Roofing Systems

Manufacturer: TARCO

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## **General Description:**

- LeakBarrier® EasyStickTM Plus is a self-adhered, polyester reinforced, granular surfaced, SBS modified bitumen roll roofing membrane intended for use as a cap sheet.
- LeakBarrier® EasyLayTM is mechanically attached, polyester reinforced, asphalt based, roll roofing material intended for use as a base or plysheet.
- LeakBarrier® EasyBaseTM is a self-adhered, fiberglass reinforced, smooth surfaced, SBS modified bitumen roll roofing membrane intended for use as a base or interply sheet.
- LeakBarrier® EasyTorchTM SA Base is a self-adhered, fiberglass reinforced, smooth surfaced, SBS modified bitumen roll roofing membrane intended for use as a base or interply sheet.
- LeakBarrier® EasyTorchTM APP Smooth is a torch applied, polyester reinforced, smooth surfaced, APP modified bitumen roll roofing membrane intended for use as a base, interply or cap sheet.
- LeakBarrier® EasyTorchTM APP Granular is a torch applied, polyester reinforced, granular surfaced, APP modified bitumen roll roofing membrane intended for use as a cap sheet.

## **Limitations and Installation:**

General installation Requirements:

All IRC and the IBC requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

For All applications: The roof shall have a minimum slope of 1/4:12.

**Table 1: Wood Deck - Mechanically Attached Insulation, Bonded Roof Cover** 

Assembly Substrate		Base Insulation		Top Ir	nsulation Layer	Roof Cover		
No.	No.		Туре		Attachment <sup>1</sup>	Base Sheet	Ply Sheet	Cap Sheet
1	Min 19/32" APA rated plywood; wood framing members spaced a maximum of 24" o.c.	(Optional) One or more layers,	() () () () () () () () () () () () () (	diame diame threa head with plate	OMG #12 with 0.220" thread diameter and 0.435" head diameter screws or OMG #14 with thread diameter of 0.245" and head diameter of 0.435".screws with OMG 3-inch Galvalume Steel plate with a thickness of 0.018".  Or, Trufast DP (#12) with a 0.209"	EasyBase	(Optional) EasyBase	EasyStick Plus
1		any combination, loose laid	Fiber Roof Board	Roof thread diameter and 0.425" hea		EasyTorch™ SA Base	(Optional) EasyTorch ™ SA Base or EasyTorch ™ APP Smooth	EasyTorch  ™ APP Granular or EasyTorch  ™ APP Smooth
Design Pressure (psf)		Insulation Attachment						
		Density (sq. feet. / fastener)		Parts per 4 x 4' board		Parts per 4 x 8' board		
0	0 < P < 52.5		1.0		16	32		

Table 2: Wood Deck - Loose Laid Insulation, Mechanically Attached Base Sheet, Bonded Roof Cover

Assembly	Substrate	Inculation Lavorda	Base Sheet		Roof Cover		
No.	Substrate	Insulation Layer(s)	Туре	Fasteners <sup>1</sup>	Ply	Сар	
2	Min. 19/31" APA rated plywood; wood framing members spaced a maximum of 24" o.c.	Any type, thickness or		OMG #12 with 0.220" thread diameter and 0.435" head diameter screws or OMG #14 with thread diameter of 0.245" and head diameter of 0.435".screws with OMG 3-inch Galvalume Steel plate with a thickness of 0.018".  Or, Trufast DP (#12) with a 0.209" thread diameter and 0.425" head diameter fasteners or Trufast HD (#14) with a 0.235 thread diameter and 0.425" head diameter fasteners with Trufast 3" Metal Insulation Plates with a diameter of 3.23" and a thickness of 0.16".	EasyBase™	EasyStick Plus™	
			EasyLay™		EasyTorch™ SA Base	EasyTorch™ APP Granular or EasyTorch™ APP Smooth	
Design Pressure (psf)		Base Sheet Attachment					
	0 < P <u>&lt;</u> 60	10" o.c. at 4" laps and 10" o.c. at two, equally spaced, staggered center rows.					

- ERD #T6460.06.07-R1, Table 2A, Sample 4 and Appendix 1, System W-2
- ERD #T6460.06.07-R1, Table 1: Allows use of alternate fasteners.
- ERD #T39040.11.11: Table 3A & 3B allows use of EasyTorch torch applied system as alternate to EasyBase (self-adhering system) Trufast DP and Trufast HD fasteners are approved fasteners for use with TF 3" Metal Insulation Plates (previously known as MP-3). Trufast products were approved for use as part of original test report (ERD T6460.06.07-R1)

Table 3: Wood Deck - Mechanically Attached Base Sheet, Bonded Roof Cover

0	la la a Nila			Base Sheet	Roof Cover		
Assem	ibly No.	Substrate	Type Fasteners <sup>1</sup>		Ply	Сар	
		Min 19/32" APA rated plywood; wood framing members spaced a maximum of 24" o.c.	EasyLay™	0.131 shank diameter, 0.375 head diameter and minimum 1-1/4" length annular ring shank nails and min. 32-gauge, 1-5/8" diameter tin caps.	EasyBase™	EasyStick Plus™	
3					EasyTorch™ SA Base	EasyTorch™ APP Granular or EasyTorch™ APP Smooth	
	Design Pressure (psf)		Base Sheet Attachment				
	0 < P ≤ 60			7" o.c. at 4" laps and 7" o.c. at three, equally spaced, staggered center rows.			

- ERD #T6460.06.07-R1, Table 2A, Sample 2B and Appendix 1, System W-4
- ERD #T39040.11.11: Table 3A & 3B allows use of EasyTorch torch applied system as alternate to EasyBase (self-adhering system)

Table 4: Wood Deck - Mechanically Attached Base Sheet, Bonded Roof Cover

Assembly	Cubatuata		Base Sheet	Roof Cover	
No.	Substrate	Туре	Fasteners <sup>1</sup>	Ply	Сар
4	Min 19/32" APA rated plywood; wood framing	Food ov IM	OMG #12 with 0.220" thread diameter and 0.435" head diameter screws or OMG #14 with thread diameter of 0.245" and head diameter of 0.435".screws with OMG 3" Galvalume Steel plate with a thickness of 0.018". Or, Trufast DP (#12) with	EasyBase™	EasyStick Plus™
4	members spaced a maximum of 24" o.c.	EasyLay™	a 0.209" thread diameter and 0.425" head diameter fasteners or Trufast HD (#14) with a 0.235 thread diameter and 0.425" head diameter fasteners with Trufast 3" Metal Insulation Plates with a diameter of 3.23" and a thickness of 0.16".	EasyTorch™ SA Base	EasyTorch™ APP Granular or EasyTorch™ APP Smooth
Design Pressure (psf)  Base Sheet Attachment					
	0 < P ≤ 60	10-inch o.c. at 4" laps and 10" o.c. at two, equally spaced, staggered center rows.			

- ERD #T6460.06.07-R1, Table 1: Allows use of alternate fasteners.
- Review of performance and mode of failure between Sample 4 (-60 psf) vs Sample 2B (-60 psf) allows for Sample 4 to be none insulated.
- ERD #T39040.11.11: Table 3A & 3B allows use of EasyTorch torch applied system as alternate to EasyBase (self-adhering system) Trufast DP and Trufast HD fasteners are approved fasteners for use with TF 3" Metal Insulation Plates (previously known as MP-3). Trufast products were approved for use as part of original test report (ERD T6460.06.07-R1)

Table 5: Wood Deck - Bonded Roof Cover

Assembly	Substrate	Roof Cover				
No.	Substrate	Base	Ply	Сар		
	Min 19/32" APA rated plywood; wood framing	EasyBase	(Optional) Easy Base	EasyStick Plus		
5	members spaced a maximum of 24" o.c.	EasyTorch™ SA Base	(Optional) EasyTorch™ SA Base or EasyTorch™ APP Smooth	EasyTorch™ APP Granular or EasyTorch™ APP Smooth		
	Design Pressure (psf)		Base Sheet Attachment			
	0 < P ≤ 75	Fully-Adhered Base Sheet				

Table 6: Concrete Deck -Bonded Roof Cover

Assembly	Substrate	Roof Cover			
No.	Substrate	Base	Сар		
6	Structural Concrete	Easy Torch™ APP Smooth	Easy Torch™ APP Granular or EasyTorch™ APP Smooth		
Design Pressure (psf)		Base Sheet Attachment			
0 < P <u>&lt;</u> 670		Torch Applied			

**Note:** Keep the manufacturer's installation instructions at the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.