**MANUFACTURER’S GUIDE SPECIFICATIONS**

# SECTION 07 13 26

**MIRAPLY-H BLINDSIDE SELF-ADHERING SHEET WATERPROOFING**

900 Hensley Lane • Wylie TX 75098 • 800-527-7092 • [www.carlisleccw.com](http://www.carlisleccw.com/)

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MiraPLY-H Blindside Waterproofing System

## PART I - GENERAL

* 1. DESCRIPTION

Carlisle Coatings & Waterproofing Blindside Waterproofing System utilizes the MiraPLY Waterproofing System fully adhered to poured` concrete. The dual membrane is comprised of TPO and Butyl Alloy adhesive with a total thickness of 70mils.

* 1. RELATED SECTIONS - Include, but not limited to the following
		1. Section 031000 - Concrete Forming
		2. Section 312000 – Earth Moving
		3. Section 031500 – Concrete Accessories
		4. Section 031500 – Hydrophilic Waterstop
		5. Section 316200 - Driven Piles
		6. Section 316400 - Caissons
		7. Section 032000 - Concrete Reinforcing
		8. Section 033000 – Cast-In-Place Concrete
	2. REFERENCE STANDARDS
		1. ASTM D 412 Standard Test Methods for Rubber Properties in Tension
		2. ASTM D 570 Standard Test Methods for Water Absorption of Plastics
		3. ASTM D 624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
		4. ASTM D 882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting
		5. ASTM D 903 Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
		6. ASTM D 1876 Standard Test Method for Peel Release of Adhesives (T-Peel)
		7. ASTM D 1970 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
		8. ASTM D 3767 Standard Practice for Rubber - Measurements of Dimensions
		9. ASTM D 5385 Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes
		10. ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials
		11. ASTM E 154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover
	3. QUALITY ASSURANCE
		1. MiraPLY-H, Blindside Waterproofing System must be installed by a Carlisle Coatings & Waterproofing Inc Authorized Applicator. There must be no deviations made from Carlisle's specifications or details without the prior approval from Carlisle Coatings & Waterproofing Inc.
		2. A pre-installation meeting shall be coordinated by the General Contractor and attended by the waterproofing applicator and other trades working on the Blindside System both before and after installation. The purpose of this meeting is to discuss the necessity of ensuring proper waterproofing membrane protection during all phases of installation and to review other applicable requirements or unusual field conditions.
		3. Provide primary materials which are the products of one manufacturer, for each type of material required for the work.
	4. SUBMITTALS
		1. General: Submit in accordance with Section 01 33 00.
		2. Product Data: Submit manufacturer's product literature and installation instructions.
		3. Subcontractor’s approval by Manufacturer: Submit document stating manufacturer's acceptance of subcontractor as an Approved Applicator for the specified materials.
		4. Warranty: Submit a sample warranty identifying the terms and conditions stated in Section 1.06.
	5. WARRANTY

Provide a written, single-source warranty for all system components agreeing to promptly make repairs or replace defective waterproofing system materials without additional cost to the owner during the warranty period.

* + 1. A 5, 10, 15 or 20-year System Warranty is available for a charge on commercial buildings and applies only to products manufactured or marketed by Carlisle Coatings & Waterproofing Inc. The membrane system is defined as membrane, flashings, adhesives, sealants and other Carlisle brand products utilized in this installation.
	1. JOB CONDITIONS
		1. Coordination between various trades is essential to avoid unnecessary traffic to prevent damage to the membrane. Heavily traveled areas must be protected by placing temporary protection courses to prevent damage to the membrane.
		2. Coordinate waterproofing work with other trades. The applicator shall have sole right of access to the specified areas for the time needed to complete the application.
		3. Protect adjoining surfaces not to be waterproofed against damage or soiling. Protect plants, vegetation and animals which might be affected by waterproofing operations.
		4. Wear applicable protective clothing and respiratory protection gear.
		5. Maintain work area in a neat and orderly condition, removing empty containers, rags, and rubbish daily from the site.
	2. PRODUCT DELIVERY, STORAGE AND HANDLING
		1. Deliver materials to project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with the following information.
			1. Name of material
			2. Manufacturer's stock number and date of manufacture
			3. Material safety data sheet
		2. Store membrane and accessory products in a protected area out of direct sunlight and between 40ºF and 100ºF. Protect from rain, physical damage and construction traffic.

PART II PRODUCTS

* 1. GENERAL
		1. Provide products manufactured and supplied by Carlisle Coatings & Waterproofing Inc, 900 Hensley Lane, Wylie Texas 75098, phone (800) 527-7098, fax (972) 442-0076.
		2. Distributed by: Bowman Construction Supply, 10801 E. 54th Avenue, Denver, CO 80239;Phone: (303) 696-8960
		3. The components of this Blindside System are to be products of Carlisle Coatings & Waterproofing Inc. The installation, performance or integrity of products by others is not the responsibility of Carlisle Coatings & Waterproofing Inc and is expressly disclaimed by the warranty.
	2. MEMBRANE
		1. Sheet membrane: Shall be CCW-MiraPLY - H self-adhering adhesive coated membrane, and shall meet or exceed the requirements listed in charts found on Technical Data Sheet.
	3. RELATED ACCESSORY PRODUCTS
		1. Seam Tape: MiraPLY Seam Tape, MiraPLY Seam Tape LT or SecurTAPE – 6” wide
		2. Detailing Tapes: Shall be:
			1. MiraPLY Detail Tape – 6” wide
			2. P/S Elastoform Flashing
		3. Primers:
			1. Low VOC Primer
			2. HP-250 Primer
			3. CAV-GRIP
		4. Termination Sealant:
			1. Sure-Seal Lap Sealant
			2. Universal Single Ply Sealant
		5. Detail Sealants:
			1. Sure-Seal Lap Sealant
			2. Universal Single Ply Sealant
			3. DOW 758
		6. 2-Part Liquid Membrane: CCW-703V LiquiSeal
		7. Reinforcing Fabric:
			1. CCW-LiquiFiber – 6”, 12” wide
		8. Termination Bar: Sure-Seal Termination Bar
		9. Water Stop: CCW MiraSTOP
		10. Backer Rod: Closed-cell polyethylene foam rod
		11. Expansion Joints: EJ-500
		12. Drain Composite: CCW MiraDRAIN Drainage Composite as selected per project
		13. Perimeter Drainage System: Where required, shall be CCW MiraDRAIN HC
		14. Cleaner: Weathered Membrane Cleaner or approved equal.

2.4 CARLISLE BLINDSIDE PHYSICAL PROPERTIES MiraPLY – H

Please refer to Technical Data Sheet.

PART III EXECUTION

* 1. GENERAL

Before any waterproofing work is started the waterproofing applicator shall thoroughly examine all lagging and support for any deficiencies. Should any deficiencies exist, the architect, owner, or general contractor shall be notified in writing and corrections made.

* 1. SUBSTRATE REQUIREMENTS

The substrate shall be even without noticeable high spots or depressions, smooth, free of protrusions, debris, sharp edges or foreign materials and must be free of accumulated water, ice and snow. Earth, crushed stone, or soil shall be compacted such that the soil is not displaced from traffic or concrete placement.

* + 1. Before any waterproofing work is started the waterproofing applicator shall thoroughly examine all surfaces for any deficiencies. Should any deficiencies exist, the architect, owner, or general contractor shall be notified in writing and corrections made.
		2. All work shall be performed in accordance with Carlisle-CCW application instructions.
	1. INSTALLATION: HORIZONTAL

Refer to the applicable Manufacturer's Technical Data Bulletins for cautions and warnings.

* + 1. All substrates shall be smooth and even. Concrete substrate should likewise be smooth and monolithic. Gaps or voids greater than 0.5in (12mm) shall be filled. Gravel sub-base must be 3/4" or smaller aggregate, level and compacted. Install MiraDRAIN over sub-base before installing MiraPLY-H, if substrate requirements cannot be met or required by project requirements. There is to be no standing water.
		2. CCW MiraDRAIN Composites by Carlisle Coatings and Waterproofing is an acceptable substrate. Install CCW MiraDRAIN with fabric side facing down.
		3. Always comply with the instructions found in manufacturer’s literature, which includes:
			1. Apply the product with the TPO surface against the prepared surface and the butyl alloy adhesive side facing up.
			2. Carefully position successive sheets to overlap the previous sheet by 3 in. (75mm)

minimum along the lap line. Be sure the product lays flat with no openings. End laps must be staggered.

* + - 1. For side laps simultaneously remove the release liner on the FAT (factory applied tape) pre-primed strip then mate the two sheets together.
			2. For end laps, position the MiraPLY Seam Tape in the lap area. Remove release liner on the MiraPLY Seam Tape and mate the two sheets together. For SecurTAPE option, the TPO and Butyl surfaces of lap area shall be clean and primed with HP-250 Primer or Low VOC Primer and allow to flash off then position SecurTAPE 6" in the lap area. Remove release liner on the SecurTAPE and mate two sheets together. Lap area shall be rolled with firm hand pressure to ensure a continuous bond is achieved.

MiraDRAIN, MiraPLY and SecurTAPE are registered t rademarks of Carlisle.

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