

COMPLETE WATERPROOFING ONE COMPANY

CCW provides a complete line of waterproofing solutions and the expertise to help you select the one that is best for your project.



CCW Deck Coatings



Barricoat™-S



CCW MiraDRI® 860/861



CCW MiraCLAY®



CCW MiraDRAIN®



Air & Vapor Barrier Systems



CCW 525



Visit Our Web Site at

www.carlisle-ccw.com

- **Updates**
- **Data Sheets**
- **Contacts**
- **Guide Specifications**
- **Architectural Details**
- **Technical Bulletins**

LIMITED WARRANTY

Carlisle Coatings & Waterproofing, Incorporated (Carlisle) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any Carlisle materials prove to contain manufacturing defects that substantially affect their performance, Carlisle will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by Carlisle with respect to its materials. There are no other warranties including the implied warranties of merchantability and fitness for a particular purpose.

Carlisle specifically disclaims liability for any incidental, consequential or other damages including, but not limited to, loss of profits or damages to a structure or its contents arising under any theory of law whatsoever.

The dollar value of Carlisle's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the Carlisle material in question.

900 Hensley Lane • Wylie TX 75098
800-527-7092 • www.carlisle-ccw.com



Carlisle, Eco-Fast, Barricoat, MiraDRI, MiraCLAY and MiraDRAIN are trademarks of Carlisle. © 2008 Carlisle. 601402 CCW-MiraDRI 860/861 06/09

CCW MIRADRI 860/861

Self-Adhering Sheet-Applied Waterproofing Membrane

C A R L I S L E C O A T I N G S & W A T E R P R O O F I N G



800.527.7092 | www.carlisle-ccw.com



CCW MiraDRI 860/861 Self Adhering Sheet Applied Waterproofing Membrane

Carlisle Coatings & Waterproofing, Inc. (CCW) provides a broad range of solutions to meet specific waterproofing needs. CCW offers technical services, research & development and manufacturing capabilities from its headquarters in Wylie, Texas and three additional manufacturing facilities in Terrell, TX; Elberton, GA; and Carlisle, PA. The CCW network is further supported by over 50 manufacturer's sales representatives directed by regional sales offices throughout the country. CCW offers a complete line of waterproofing and moisture protection products for the architectural, general construction, industrial and maintenance industries. Carlisle Coatings & Waterproofing, Inc., is part of the SynTec Division of Carlisle Companies, Inc., which is a publicly traded company on the NYSE.

Protection from the damaging effects of water can be achieved quickly and easily with



FEATURES AND BENEFITS

- Fully-Adhered Membrane: Eliminates Water Migration Which Can Otherwise Cause Leakage Through Cracks
- Factory Controlled Thickness: Eliminates Thin Spots Which Could Be Easily Penetrated, Allowing Leakage
- Preformed Sheet: Eliminates Pinholing
- Flexibility Over Cracks: Elastomeric Properties Accommodate Normal Expansion and Contraction of the Substrate
- Resists Hydrostatic Pressure
- Mechanically Strong
- Easy to Apply
- Cost-Competitive: The Highest Performance System with the Best LifeCycle Cost
- The CCW MiraDRI/MiraDRAIN Systems Guarantee: A Safe Waterproofing Choice from a Reliable Company Backed by a Combined CCW Systems Warranty

CCW MiraDRI 860/861. Focusing on below-grade foundation walls, this peel-and-stick-applied waterproofing membrane is easy to handle, simple to apply and provides long-lasting protection. CCW MiraDRI 860/861 works best when suited with the appropriate CCW MiraDRAIN Drainage System, which protects the membrane, provides a channel for water migration and eliminates hydrostatic pressure. With all the benefits of factory-controlled properties and the waterproofing characteristics of asphalt, CCW MiraDRI 860/861 is the easy choice for contractors and applicators alike.

DO IT RIGHT THE FIRST TIME

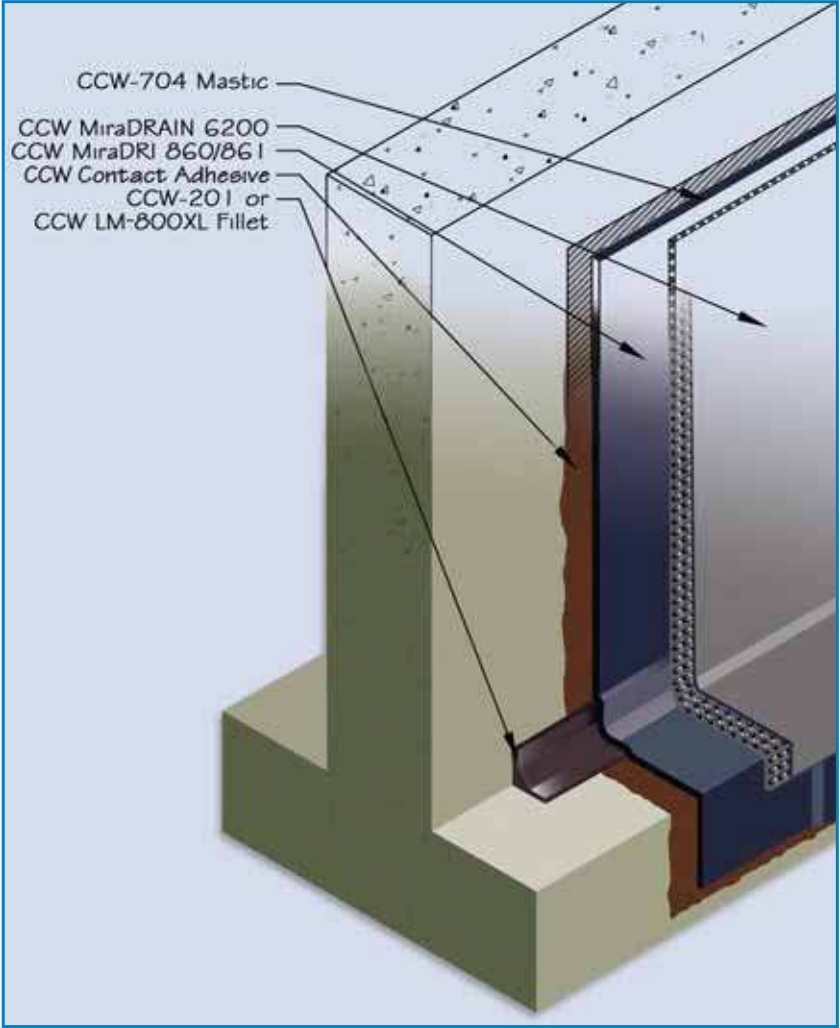
Providing long-term, leak-free buildings and structures demands the use of high-quality materials. Otherwise, subsequent repair work can be extremely costly and time consuming. The Carlisle Coatings & Waterproofing system has been engineered to provide you with a superior product to do it right the first time.

CCW MIRADRI: A FOOLPROOF WATERPROOFING SYSTEM

CCW MiraDRI self-adhering membranes are composite materials consisting of a specially formulated rubberized asphalt laminated to a high-impact-resistant plastic film. The CCW MiraDRI waterproofing system is designed to

provide waterproofing protection for below-grade foundation walls, slabs, parking decks, plaza decks, tunnels and many other interior and exterior applications. The CCW MiraDRI waterproofing system consists of the self-adhering membrane, an environmentally friendly water based primer for surface preparation, a liquid membrane for detailing and mastic to seal termination points.

The installed CCW MiraDRI waterproofing membrane is protected by CCW MiraDRAIN drainage composites or CCW Protection Courses. CCW MiraDRAIN drainage composites protect waterproofing systems and keep the water away from the building structure. CCW MiraDRAIN provides a cost-effective solution as compared to traditional protection boards and aggregate drainage systems.



TECHNICAL DATA

Property	Test Method	Typical Value
Color	—	Dark Gray
Tensile (Membrane)	ASTM D412	325 psi
Tensile (Film)	ASTM D882	5,000 psi
Elongation	ASTM D412	350%
Permeance	ASTM E96	0.05 perms
Low Temp. Flexibility (100 Cycles)	ASTM D1970 ASTM C836	Unaffected, @ 45°F Cracking Cycle* Unaffected @ -25°F
Peel Strength	ASTM D903	10 lb/in
Lap Adhesion	ASTM D1876	19.0 lb/in
Puncture Resistance	ASTM E154	60 lb min
Soil Burial	GSA-PBS 07121	16 wks, no effect
H ₂ O Absorption	ASTM D570	0.1% by wt
Hydrostatic Head	ASTM D751	230 ft

* 180° bend over a 1" (25mm) mandrel at -45°F (-43°C)

INSTALLATION GUIDELINES

CCW MiraDRI 860 Membrane is used for applications where surface temperatures are 40°F (4.4°C) and above. CCW MiraDRI 861 is specially formulated for applications with cooler surface temperatures down to 25°F (-3.9°C). CCW MiraDRI membranes should not be applied in temperatures below 25°F (-3.9°C).

Substrate Preparation: CCW MiraDRI 860/861 can be applied to concrete, metal, wood, insulated wall systems or masonry surfaces. All substrates must be clean, dry and free of surface irregularities.

Concrete Substrates: Structural concrete must be cured a minimum of seven days and lightweight structural concrete must cure a minimum of 14 days before the application of CCW MiraDRI 860/861. Repair surfaces that are not structurally sound, have voids, protrusions, rough spalled areas, loose aggregate or exposed coarse aggregate. Void areas should be filled with latex Portland cement, concrete or epoxy concrete and troweled smooth to match the existing surface. Protrusions and other rough areas should be broken off and patched as above. CCW LM-800XL or CCW-201 may be used to fill small voids, honeycombs or bug holes.

Masonry Substrate: Rough masonry may require the surface to be parged with a plaster coat of cementitious material to form a well-adhered, smooth and uniform finish.

Allow the parge coat to dry before priming and installing the CCW MiraDRI 860/861 waterproofing membrane.

Priming: CCW Primers can be spray or roller-applied at an approximate rate of 250-600 ft.² (23-56 m.²). Primer should be allowed to dry for at least 30 minutes, depending on product selection and climactic conditions. Prime only the areas which will be covered by the membrane in the same day.

Membrane Application: Start membrane application by removing the release paper. Begin applying the membrane, beginning at the low point and working toward the high point. Side laps should be 2 1/2" (6.3 cm) minimum and end laps should be 5" (12.7 cm) minimum. The membrane should be rolled immediately after its placement to ensure full adhesion to the primed surface. A minimum 3/4" (1.9 cm) fillet should be applied at juncture of footing and foundation wall. Double coverage should be used on all inside and outside corners using a nine inch (22.9 cm) strip of CCW MiraDRI membrane. All joints, drains, penetrations and protrusions should also receive double coverage. All terminations of the membrane should receive a troweled bead of CCW-704 Mastic.

Membrane Protection: CCW MiraDRAIN Drainage Composites, CCW Protection Boards or CCW Protection Fabric should be applied at the end of each day's work to avoid damage caused by other

trades, construction materials or backfill. For more information on installation guidelines, refer to the Manufacturer's Guide Specification or contact your local CCW representative.

STANDARDS, TESTS, CERTIFICATES

- Federal Construction Guide Specification FCGS 07111
- Veterans Administration H-08-1 Section 07113
- General Services Administration PBS 07115
- GSA; PBS PCD 07121
- UL 790, Class A

