

# CCW-705FR

## Self-Adhering Sheet, Fire-Resistant Air & Vapor Barrier

CARLISLE COATINGS & WATERPROOFING INCORPORATED

### DESCRIPTION

CCW-705FR, manufactured by Carlisle Coatings & Waterproofing Incorporated (CCW), is a self-adhering sheet membrane of inherent fire-resistant composition. It is a 40-mil (0.040 inch) thick composite membrane consisting of foil-faced glass laminated with a proprietary, fire-resistant, pressure-sensitive, butyl adhesive. The foil facing has a non-reflective coating and is clearly imprinted with manufacturer's name and brand. CCW-705FR is provided in rolls of various widths lined with disposable silicone-coated plastic release film. The release film is removed to expose the adhesive as the membrane is pressed in place. CCW-705FR does not require any torching, spray equipment or any other special equipment.



**FIRE**   
**RESISTANT**

### TYPICAL USE

CCW-705FR is designed for use in above-grade wall assemblies to function as an air, vapor and water barrier. CCW-705FR can be applied over many common building materials including gypsum sheathing, concrete masonry unit (CMU), foam insulation board, concrete, wood, structural steel, metal flashings, aluminum extrusions and rigid PVC (examples: pipe/conduit or window frame). All substrates are prepared with a CCW contact adhesive to guarantee consistent adhesion of CCW-705FR in jobsite conditions.

### FEATURES AND BENEFITS

- Fire-resistant composition permits use in many wall assemblies (NFPA 285 compliant)
- Printed facer provides easy product identification
- Toughness and 180-day UV resistance allows long exposure time and scheduling flexibility
- Factory-controlled composition provides uniform coverage and instant rain resistance after installation
- Self-adhering membrane provides easy installation, which can be completed over a wide temperature range (25°F and above)
- Membrane seals around fasteners and bridges cracks, providing an air- and water-tight assembly
- Non-asphalt adhesive is compatible with silicone and polyurethane joint sealants
- Coated foil facing provides an excellent substrate for window silicone and polyurethane sealants and insulation adhesives
- CCW-705FR is a complete system warranted by CCW

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**TECHNICAL DATA**

PROPERTY	METHOD	RESULTS
Thickness	--	0.040 inch (40 mils)
Service Temperature	--	-40°F to 180°F
Application Temperature	--	Minimum 25°F, ambient and substrate
Water Vapor Permeance 50% to 100% RH	ASTM E96 B (water method) ASTM E96 A	1 Perm maximum  0.1 Perm maximum
Low-Temp Flexibility	ASTM D1970, 180°F bend over 1-inch mandrel	No cracking at -20°F
Low-Temp Crack Bridging	ASTM C1305	No cracking after 10 cycles at -15°F
Puncture Strength	ASTM E154	70 lb minimum
Tensile Strength	ASTM D882	65 lb/in width, minimum
Lap Peel Strength	ASTM D1876	10 lb/in width, minimum
Pull Adhesion	ASTM D4541, modified. 4-inch wood puck	20 PSI on glass-faced gyp sheathing 20 PSI minimum on CMU (all substrates prepared with CCW-702)
Tear Initiation and Propagation (film)	ASTM D4073	60 lb/in width, minimum machine and cross direction
Water Resistance	AATC 127-03, mod. 3 inch lap included in sample	55 cm [22 inch] column of water for 5 hours. No leakage.
Air Permeance	ASTM E2178	0.001 L/s*m <sup>2</sup> @ 75 Pa [0.0002 CFM/ft <sup>2</sup> @ 1.57 PSF]
Nail Sealability	ASTM D1970	No water leakage
Burn Performance – Wall Assemblies	NFPA 285	Pass –various exterior wall assemblies with up to 2 ½ inch XPS insulation and up to 3 inches of Hunter XCi insulation

**PROJECT CONDITIONS**

Building codes and project specifications require continuity of the air barrier installation. It is the installer's responsibility to understand the extent and sequencing of air barrier installation on the project. Do not proceed with installation until substrate and project conditions conform to requirements specified in this document. All surfaces accepting CCW-705FR shall be clean, dry, frost free and of sound condition. Verify that wall assemblies are dried in, such that water intrusion will not occur from above, behind or around the membrane installation. Gaps and cracks exceeding ¼ inch across shall be filled with materials and technique approved by CCW. As CCW-705FR cannot span any gap in excess of ¼ inch; electrical/mechanical penetrations, structural steel penetrations, columns/beams, expansion/seismic joints, shelf angles, tie-ins to fenestration and transitions to other building assemblies may require extra work and materials to provide suitable surfaces for continuous installation of CCW-705FR. Please consult the CCW-705FR details for guidance.

**SUBSTRATE INSPECTION****Concrete:**

Shall be cured in place for 7 days minimum. It shall be smooth, with sharp protrusions such as form joints ground flush. Honeycomb and holes/cracks exceeding ¼ inch across shall be filled with grout or mortar.

**Concrete Masonry Unit (CMU):**

Mortar joints shall be struck flush and shall be free of voids exceeding ¼ inch across. Mortar droppings shall be removed from brick ties and all other surfaces accepting CCW-705FR.

**Gypsum Sheathing:**

Sheathing boards shall be flush at joints, with gaps between boards spaced according to building code and sheathing manufacturer's requirements. Sheathing boards shall also be securely fastened to the structure with proper fastener type, technique and spacing according to building code and sheathing manufacturer's requirements. Sheathing boards shall be repaired or replaced if inspection reveals moisture damage, mechanical damage or if sheathing boards have exceeded the exposure duration or exposure conditions as required by the sheathing manufacturer.

**OSB, Plywood, Lumber, Pressure-Treated Wood:**

Wood sheathing inspection carries the same protocol given for gypsum sheathing. In addition, moisture content,

measured with a wood moisture meter in the core of the substrate, shall be below 20%. Do not cover any wooden materials with CCW-705FR if moisture content is 20% or more. Do not encapsulate wood (such as blocking/nailers) with CCW-705FR, as this will cause premature rot.

## **SURFACE PREPARATION**

Apply CCW contact adhesive to ALL surfaces accepting CCW-705FR. CCW-702, CCW-702 WB, CCW-715, CAV-GRIP™ and TRAVEL-TACK™ are all acceptable for this application. Follow the application instructions on the respective contact adhesive product data sheet.

## **INSTALLATION**

Install CCW-705FR in horizontal rows or in vertical runs. Wipe dust or debris from film side of product with a clean, dry rag to assist in forming tight laps. Avoid forming wrinkles and air pockets. Press membrane firmly to substrate with a hand roller, especially at laps, corners and terminations. Overlap adjoining pieces of CCW-705FR a minimum of 3 inches. Use CCW-705FR Strips for detailing. Sequence the installation to provide shingled laps. Membrane shall bear minimum 3 inches onto each side of transitions such as joints, angle changes and substrate changes. Membrane shall bear 6 inches minimum onto adjacent membrane systems such as foundation waterproofing or roofing. Apply SURE-SEAL® Lap Sealant or other approved sealant to field-cut edges, T-joints, reverse laps and terminations.

## **INSPECTION, REPAIR AND SCHEDULE**

Protect membrane from damage by other trades. Do not cover work until it has been inspected according to project requirements. Cover CCW-705FR with cladding system as soon as schedule permits. Once CCW-705FR is installed, avoid heating the building until the insulation is installed. CCW-705FR can be left exposed to sunlight for a maximum of 180 days. Repair damage to membrane by removing loosely adhered material and re-covering with CCW-705FR patch, extending beyond the damage by at least 3 inches. Where CCW-705FR patch or re-cover is installed, clean debris from surfaces of the old CCW-705FR and prepare with CCW contact adhesive. TRAVEL-TACK, a CCW contact adhesive provided in convenient aerosol cans, can be used for this and similar touch-up applications. Seal terminations of repair patch with SURE-SEAL Lap Sealant or other approved sealant. If multiple sheets are used in CCW-705FR repair/re-cover, offset seams of new installation 12 inches minimum versus underlying CCW-705FR.

## **LIMITATIONS**

- Do not proceed with installation unless ambient and substrate temperature are 25°F or above.
- Do not install in areas expected to reach 181°F or higher.
- CCW-705FR is a vapor barrier. The design professional shall determine appropriate use in project wall assemblies.
- Do not leave exposed for more than 180 days.
- Not intended for traffic resistance or as a wearing surface.
- Do not install on roofs.
- Do not install over un-cured sealants, except SURE-SEAL Lap Sealant.

## **PACKAGING**

### **CCW-705FR**

48" x 50' roll, 1 per box  
24" X 50' roll, 1 per box

### **CCW-705FR Strips**

12" X 50' roll, 4 per box  
9" X 50' roll, 4 per box  
6" X 50' roll, 8 per box  
4" X 50' roll, 12 per box

### **CCW Contact Adhesives**

CCW-702 solvent based 5-gal pail  
CCW-702LV solvent based, VOC compliant. 5-gal pail  
CCW-702WB water-based  
CCW-715 solvent based for green concrete  
CAV-GRIP 40# Cylinder  
CAV-GRIP gun  
CAV-GRIP 18' hose  
CAV-GRIP 12' hose  
CAV-GRIP 6' hose  
TRAVEL-TACK 1- oz aerosol cans, 12 per carton

### **CCW Sealants**

CCW-201 2-part Polyurethane, 1.5-gal kit  
SURE-SEAL Lap Sealant, 10-fl-oz tubes, 25 per carton

### **Other Approved Sealants**

Silicone or polyurethane joint sealants meeting ASTM C920, type S or M, grade NS, Class 25, 35, 50 or 50/100, Use NT are approved for use over CCW-705FR. CCW-705FR can be installed over fully-cured polyurethane sealant. The adhesive side of CCW-705FR will not stick to cured silicone.

## **STORAGE**

Store CCW-705FR in a protected area between 40°F and 90°F. Shelf life in original, un-opened packaging is 1 year.

## 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.