



Advanced Composite Technology



AC Half/Lap

ROOFING

## Self Adhesive, Double Coverage, Mineral Surfaced Rolled Roofing

### DESCRIPTION

AC HalfLap is a self adhesive, rubberized asphalt roll roofing product. AC HalfLap consists of a proprietary modified asphalt, a tough fiberglass reinforcing core and patented surface consisting of a 17" (.43m) granular surface and a 19" (.48m) selvedge surface. The granular surface protects against UV, weathering and physical damage. The selvedge edge provides excellent adhesion of successive courses. The result is a unique, durable, double coverage system for your roof.

AC HalfLap composite is available in 100 sq. ft. (9.3 sq.m.) rolls, 3' x 33.3' (0.9sq. m x 10.1sq. m).

### USES

AC HalfLap is a patented, double coverage, self adhering roofing system for use on low slope wood decks, such as porches, utility buildings, dormers, mobile homes, and commercial buildings. The rugged construction provides outstanding, long term performance. AC HalfLap is self adhesive for fast, easy installation without hot asphalt, heat or special equipment.

### APPLICATION

The deck must be structurally sound, smooth, clean, dry and free from loose materials and contaminants. AC HalfLap should be installed when ambient and substrate temperatures are 40°F (4.4°C) or higher including the 24 hours following installation.

The deck shall have positive drainage (1/4" per 12" minimum).

#### Deck Preparation - Reroof

AC HalfLap may be installed over a single existing, smooth surfaced roofing system.

Existing asphalt roofing must be smooth and dry. Blisters and wrinkles must be cut, nailed flat and sealed with roof sealant. Remove all dust, debris and loose material.

Apply AC Base Sheet parallel to and abutting the eave. End laps should be 6" and side laps a minimum of 4". Mechanically fasten AC Base Sheet to deck with approved nails, staples or cap nails, 6" on center at the laps and two staggered rows 12" on center of the field of the roll. Cover entire roof with AC Base Sheet. Apply primed metal drip edge over the AC Base Sheet and nail 6" on center. Coat the top of the drip edge with a 2" (50mm) wide bead of modified bitumen adhesive.

### INSTALLATION (End laps & Detailing on back page)

There are two methods of installing AC HalfLap

#### Method 1 - Fully adhered:

Cut AC HalfLap into manageable lengths. Allow AC HalfLap to relax from roll configuration for 5 minutes. AC HalfLap must lay flat at time of installation.

For starter course, cut the AC HalfLap lengthwise, separating the selvedge surface from the granular surface. Remove the blue release sheet from the selvedge surface sheet and install parallel to the eave overlapping the primed drip edge.

For first course, lay a full sheet of AC HalfLap over the starter course with the granular surface toward the eave.

Fold lower half of the AC HalfLap back onto itself to expose the white half of the release sheet. Remove the white release sheet and press the AC HalfLap onto drip edge and the base sheet, carefully checking your alignment. Remove tack nails from top edge. Fold the upper half of the AC HalfLap onto itself and remove the blue release liner. Press the AC HalfLap firmly onto the base sheet. If wrinkles or fishmouthing appear, the AC HalfLap must be realigned. **DO NOT** press the wrinkles or fishmouths down as they will reappear.

After each course is installed, roll with a 75lb roller to insure good initial adhesion. Successive courses should overlap lower courses the entire 19" (.48m) of the selvedge surface of the AC HalfLap.

#### Method 2 -Mechanically Attached:

Cut AC HalfLap into manageable lengths. Allow AC HalfLap to relax from roll configuration for 5 minutes. AC HalfLap must lay flat at time of installation.

For starter course, cut the AC HalfLap lengthwise, separating the selvedge surface from the granular surface. **Do not remove** the blue release sheet from the selvedge sheet. Place the selvedge sheet parallel to the eave and nail 12" on center, 3" down from the top of the sheet. Install primed metal drip edge and nail, staggered 6" on center.

For first course, lay a full sheet of AC HalfLap over the starter course with granular surface toward the eave.

Fasten the AC HalfLap through the selvedge area with two rows of fasteners, staggered 12" on center with one row 3" down from the top edge and one row 3" up from the granular surfaced portion.

Fold lower half of AC HalfLap back onto itself to expose the white half of split release sheet. Remove the white release liner and press the AC HalfLap onto the selvedge area of the previous sheet, carefully checking your alignment. Remove tack nails from top edge. **DO NOT** remove the blue half of the release sheet. By leaving the blue release sheet in place on the upper half of the AC HalfLap, successive courses create a mechanically attached system rather than a fully adhered system, allowing for deck movement. If wrinkles or fishmouthing appear, the AC HalfLap must be realigned. **DO NOT** press the wrinkles or fishmouths down as they will reappear.

# TECHNICAL DATA

## AC HalfLap

PROPERTY	TEST METHOD	MINIMUM VALUE
Tensile Strength	ASTM D 412	68 lb/in
Flexibility	ASTM D 228	Unaffected
Thermal Stability	ASTM D 228	No sliding or blistering
Water Vapor Transmission	ASTM E 96	0.02 g/hr/m <sup>2</sup> (max)
Peel Adhesion	ASTM C 794	19 lb/in
Wind Driven Rain	S.F.B.C. CRL Test 5673	100 MPH
Water Infiltration	S.F.B.C. CRL Test 5673	No Leakage
Wind Uplift Resistance Static Pressure	ASTM E 330	No Affect, -28 & -55 PSF
Fire Resistance	UL	Class B

### END LAPS

- End laps should be at least 6". Cut a 4" x 4" triangle off of the lower right hand corner of the AC HalfLap that has already been installed, leaving a 45° angle. Spread a bead of adhesive along the angled cut. Score a line vertically, 6" in from the end of the roll, marking where the overlap will occur. Apply a straight bead of adhesive, vertically, 3" in from the end of the roll. Apply a zig zag bead of adhesive, vertically, 2" in from the end of the roll. Overlap the next section to the score line, covering all the adhesive.

### Base Flashing & Curbs

- Over the completed membrane at vertical surfaces (membrane shall extend above the cant strip 2" to 3"), install a base flashing consisting of one ply of the granular surfaced portion of the AC HalfLap applied to the primed concrete or masonry surface. Remove the white release sheet prior to installation. Base flashing shall extend a minimum of 8" up the vertical surface and 4" out onto the field of the roof. Wood surfaces shall receive one ply of the selvedge surfaced portion of the AC HalfLap extending from the top of the cant strip to the height of the base flashing. Fasten the wood surface with 1" diameter capped nails. Install the granular surfaced portion as stated above for a concrete or masonry surface. Nail the top edge of the base flashing 9" on center through the tin discs. Sealing the top edge of the base flashing prior to installation of the counter flashing is required.

### Roof Penetrations

- Where projections extend through the roof surface, install a metal roof jack with 4" wide, primed continuous flange on top of the field of the membrane in a bed of modified bitumen adhesive (for nailable surfaces, flange must be nailed 3" on center and 3/4" from perimeter). Install a collar of the granular surfaced AC HalfLap over the flange to extend a minimum of 8" beyond the flange on all sides. Flashing collar should be fully adhered (remove the white release sheet) to the metal flange and field of membrane. Seal flashing around the projection with a bead of modified bitumen adhesive.

### Finishing

- Cover any exposed selvedge areas with properly sized strips cut from the granular surfaced portion of the AC HalfLap. **DO NOT** leave any of the selvedge area permanently exposed.

### SAFETY, STORAGE AND HANDLING

Pallets of AC HalfLap shall not be double stacked on the job site. Provide cover on top and sides, allowing for adequate ventilation.

Consult Material Data Safety Sheet for best available information on the safe handling, storage, personal protection, health and environmental considerations.

### AC HalfLap Colors

Black, White, Dark Brown and Tan.



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