MENTO



Installation Instructions - Roofs

SOLITEX MENTO 3000/5000 Connect is a 3-ply roof underlayment membrane with high resistance to wear, temperature exposure, and driving rain. Includes two integrated self-adhesive strips.

PLEASE NOTE

SOLITEX MENTO 3000/5000 and waterproof connections made with CONTEGA HF, TESCON VANA, and TESCON NAIDECK can be used as temporary roofing for up to 4 months or 6 months, respectively.

SOLITEX MENTO 3000/5000 is suitable for use at roof pitches 3:12 (14°) and higher - both as temporary weather protection and as roof underlayment. When pitch is below 3:12, additional measures during construction (tarps) are recommended to protect structure from rain. Until a fully waterproof roof is installed. Do not make connections in areas where water is likely to pond or gather (valleys).

Rain and UV exposure could cause dark spots to appear on the membrane, which are harmless and have no impact on membrane performance.

Always follow site and construction safety procedures.

Apply tapes at overlaps and battens over membrane as soon as possible to secure membrane to structure and prevent damages from wind suction.

EQUIPMENT

Equipment: Staple gun (if pneumatic, set compressor at appropriate pressure, so staples set flush with membrane), T50 staples (5/16" (8mm) legs with 3/8" (10mm) crown), PRESSFIX, utility knife, caulk gun, and personal protection equipment.



TESCON NAIDECK

Butyl rubber double sided adhesive tape to seal nail/screw penetrations between roof battens and SOLITEX MENTO membranes. The butyl rubber employed is set to be fluid so that it penetrates into the spunbound structure of the SOLITEX MENTO membrane as well as the batten and durably seals the nail/screw penetration.



CONTEGA HF/MULTIBOND

All-around adhesive for interior and exterior airtight connections between uneven substrates or difficult junctions. Exceptionally high adhesion properties while also remaining elastic. Low VOC, meets stringent IAQ test. Available in liquid format (HF) 310ml cartridges and 600ml sausages, and 32' rolls (MULTIBOND).



PRESSFIX

Application tool made from flexible plastic. It is suitable for uniform pressing of adhesive tapes to surfaces of all kinds. The tool can be used to provide sufficient pressure to fully activate the adhesive and achieve the optimum bond with Pro Clima tapes.



SOLITEX MENTO 3000/5000

Monolythic TEEE membrane with heavy cover fleece weathers-in roof before metal/ tile roofs are installed. Durability certified to 250°F (120°C), idea for metal/ copper roofs. TEEE allows active outward drying. Includes 2 integrated self-adhesive strips. Roll width: 591/16" (1.50m). Roll length: 164' 1/2" (50m).



TESCON VANA

Airtight, vapor open, solid acrylic adhesive tape for 100-year tested airtight and waterproof bonding of membranes and sheathing on interior and exterior. Available in a variety of widths: 2 3/8" (60mm), 3" (75mm), 4" (100mm), 6" (150mm), and 8" (200mm).



TESCON PROFIL & TESCON PROFECT

Same high performance tape properties as Tescon Vana - but with 3 split release paper (PROFIL) or prefolded on a roll with one release strip (PROFECT) to make airtight connections and waterproof seals at inside corners, window frames and beams.



DUPLEX

Double-sided airsealing tape for durable interior and exterior airtight connections between intelligent vapor membranes, aluminum foils, plywood, OSB, wood, hard plastics, steel, and metal studs. Uses Pro Clima's enhanced PSA acrylic adhesive.



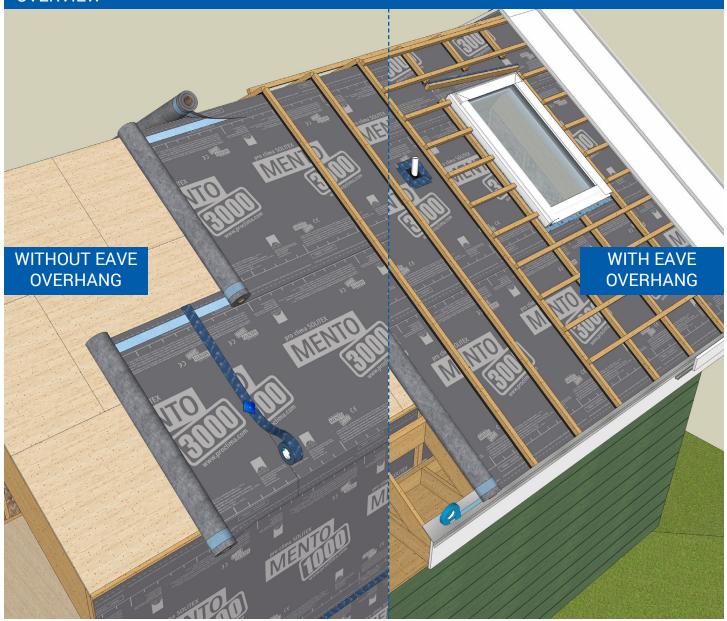
EPDM gaskets to create quick, flush, adjustable, and durable air sealing for wires (KAFLEX) and pipes (ROFLEX). Available in a variety of sizes that seal round penetrations securely from 1/4" to 12".

BLOWER DOOR

Verify airtightness of installation with a blowerdoor test. Blower doors by Retrotec are available at our website.



OVERVIEW



1 - UNROLL THE MEMBRANE



Unroll membrane perpendicular to pitch along the entire length of the roof section with the writing on MENTO 3000/5000 facing outward.

Using the printed markings as a guide, overlap MENTO over the wall sheet by at least 6".

OVER EAVE



Align bottom membrane edge with eave and unroll sheet perpendicular to pitch along the entire length of the roof section. The writing on MENTO 3000/5000 should face outward. Secure to the wall membrane with TESCON PROFIL tape.

2 - SECURE THE MEMBRANE



Only secure the membrane in areas that will be below an overlap, below battens and TESCON NAIDECK, or taped with TESCON VANA.

Attach the membrane along its upper edge to the sheathing. If fasteners are exposed they should be sealed with a piece of TESCON VANA tape.



3 - CONNECTION TO WALL MEMBRANE

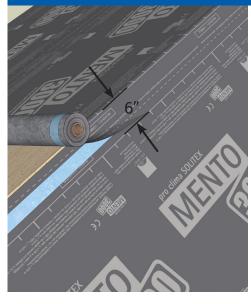
MENTO should be free of dust and silicones before using TESCON VANA to tape the overlaps. Use the dotted line to center the tape over the joint and press firmly along the entire length with a PRESSFIX tool. Damage to the membrane can be airsealed with TESCON VANA patches or VANA 150 or 200. The patch should cover damage by at least 1.5" on all sides and be properly pressurized.

4 - OVERLAP THE MEMBRANES



Unroll the next row of membrane and align by using the printed guides - overlap the bottom sheet a minimum of 6". Use the printed markings as a guide. Activate the integrated adhesive strips by removing the release papers and pressing down on the connection with a PRESSFIX, roller, or your hand.

5 - RIDGE

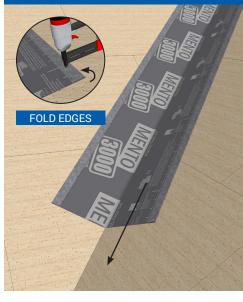


Extend one sheet of MENTO over the ridge and overlap this edge of membrane over the MENTO on the other side by at least 6".

Ensure that the portion that overlaps the ridge is extended far enough to at least be under the vented battens of the other pitch.

Use the integrated adhesive strips or TESCON VANA to airseal and waterproof the overlap of the membranes.

6 - VALLEY



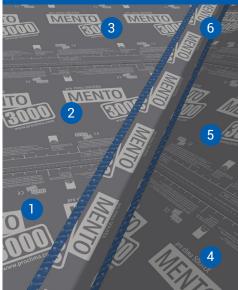
Install a MENTO gutter by laying a partial sheet of MENTO 3000/5000 from top to bottom of the valley. Fold the edges of the membrane about 3" and secure sparingly, creating a back-dam.

VALLEY CONTINUED



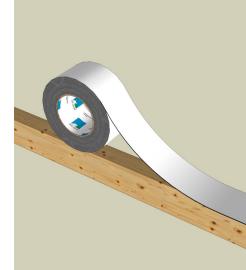
Beginning on the bottom of one side of the valley, overlap a sheet of MENTO 3000/5000 over the gutter, extending approximately halfway into the field. Seal the membrane edge with TESCON VANA tape.

6 - VALLEY CONTINUED



Overlap additional sheets of MENTO, working up one side of the valley to the roof ridge, extending each membrane approximately halfway into the field and sealing with TESCON VANA tape. Then on the opposite side, repeat from bottom to top.

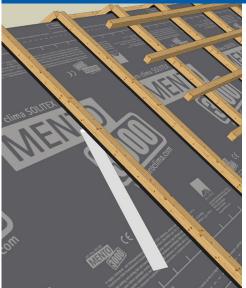
7 - BATTEN FASTENER SEALING



TESCON NAIDECK tape is applied to battens to seal nail penetrations between MENTO and vertical vented battens.

This is recommended for all roof pitches but is especially important for lower pitches and when using SOLITEX MENTO PLUS as a blown-in insulation mesh.

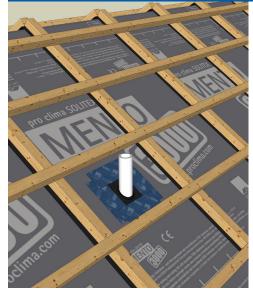
8 - BATTENS



Remove the backing strip from the TESCON NAIDECK tape as vertical battens are installed over top of joists. Add cross battens for metal or tile roofs.

For more information, see TESCON NAIDECK application guide available at www.foursevenfive. com or www. foursevenfive.ca

9 - PENETRATIONS



Airseal pipes with ROFLEX air sealing sleeves. ROFLEX 20 is self-adhering with integrated TESCON VANA patches. Other ROFLEX pipe sleeves should be adhered to MENTO with TESCON VANA.

10 - FLASHING CONNECTION



Membranes to extend over a gutter or drip edge flashing shall be fixed without creases with DUPLEX or TESCON VANA tape so water will drain away and the membrane is permanently secured.

11 - SKYLIGHTS



A subroof gutter above a roof obstruction such as a skylight or chimney should be made with a pitched batten. Attach batten to MENTO using TESCON VANA. This batten will direct all rainwater to a roof area without obstructions.

12 - CHIMNEYS



Create a subroof gutter for transverse drainage above the chimney using a pitched batten attached to the MENTO using TESCON VANA. Secure MENTO to the chimney using CONTEGA MULTIBOND or CONTEGA HF.

Install stepped flashing as required to overlap the SOLITEX MENTO and provide a waterproof connection.

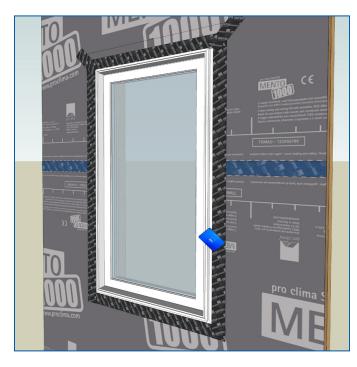
13 - SHINGLE ROOF | METAL/TILE ROOF



Other Installation Guides from 475 High Performance Building Supply



EXTERIOR WINDOW INSTALLATION



Use ProClima airsealing and flashing solutions to install windows in assemblies. This allows for optimally sealed, but vapor smart installation by using:

TESCON Profil/Profect corner tapes CONTEGA SOLIDO SL interior vapor retarding tape CONTEGA SOLIDO EXO exterior vapor open tape CONTEGA FIDEN EXO vapor permeable compriband EXTOSEAL ENCORS high performance butyl acrylic sill tape

INTELLO FOR WOOD FRAMING



For wood frame installation details, please use the appropriate method per our wood frame installation manual, available at <u>www.foursevenfive.com</u> or <u>www.foursevenfive.ca</u>

More Knowledge and Components from 475 High Performance Building Supply



GUTEX

Wood fiberboard insulation that is both exterior insulation and WRB/roof underlayment in one. High quality singleply construction, tongue & groove edges at R-3.7 per inch. Available in a variety of thicknesses.



475 Project Spotlight

A series of high-performance case studies on the 475 blog.



FAKRO FTT-U6 & -U8

Highly energy efficient triple- and quadruplepane skylights for pitched roofs.

The information provided here is based on practical experience and the current state of knowledge. Since all projects are different, the architect, engineer, designer, and installer should adapt these recommendations for the specific application situation and verify application by continuous quality control of work. We reserve the right to make changes to the recommendations given or to make alterations due to technical developments and associated improvements in the quality of our products. We would be happy to inform you of the current technical state of the art at the time you use our products.

Further information about the application and construction can be found in the 475/pro clima planning documentation.