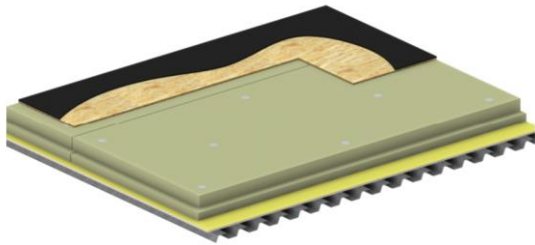


mod-panel



Mod-Panel™ is a patent pended modular roof system product that provides both a vapour/air barrier and high thermal insulation values for any type of roof membrane
Mod-Panel provides:

- Ease of installation
- Continuous insulation
- Medium density spray foam insulation
- CCMC certified products
- High windup lift resistance

The panels are lined with a 3.8 - 11" layer of bio-based spray foam insulation, which gives the roof system an impressive thermal rating. Using 2 lb medium density polyurethane insulation, the mod-panel provides:

- Tested Air barrier system,
- CCMC 13583-R.
- "Type 2" classification for high R-Value in Canada
- Watertight
- High Compressive Strength

Applications:

- New Construction
- Re-roof
- Single and Two Ply Systems

LEED Credit Potential

- LEED Credit Category–Energy & Atmosphere
- Prerequisite2–Minimum Energy Performance
Credit1–Optimize Energy Performance
- LEED Credit Category–Materials & Resources
Credit2–Construction Waste Management
- Credit5.1–5.2–Regional Materials
- Credit6–Rapidly Renewable Materials

Please Check:

Flat Roof Slope Roof Grade: _____

R Value of Roof Assembly: _____

Combustible Assembly

Non-Combustible Assembly

Type of Membrane:

EPDM PVC SBS TPO

Thermal Value	Overall Assembly Thickness*
R12	3½ inches
R20	4 ½ inches
R30	6 inches
R40	7-5/8 inches
R50	9 3/8 inches
R60	11 inches

*based on insulation core

References

1. UL-790/ASTM E-108 Class A Fire Resistance Rating.
2. ASTM D4637 Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane.
3. CGSB 37-GP-52M-1984, "Roofing and Waterproofing Membrane, Sheet Applied Elastomeric.
4. ULC/ORD-C790-4-1996 Roof Drains
5. UL 1897 Standard for Safety Uplift Tests for Roof Covering Systems
6. ASTM D 1621: Standard Test Method for Compressive Properties Of Rigid Cellular Plastics,
7. ASTM D 1622: Standard Test Method for Apparent Density of Rigid Cellular Plastics;
8. ASTM D 2126: Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging;
9. ASTM E 96: Standard Test Methods for Water Vapor Transmission of Materials, Procedure A: desiccant method

Technical Specifications

Property	Testing	Test Method
Compressive Strength	282 kPa (42 psi)	ASTM D1621
Tensile Strength	406 kPa (59 psi)	ASTM D1621
Water Absorption	< 3%	ASTM D2842
R value per inch	R6	CAN/ULC-S770
Air Permanence	0.0005	
Water Vapor Permanence (for 1 inch)	58ng/PAsm ²	ASTM E96

FOR ARCHITECT'S USE ONLY:

Accepted Accepted as Noted Not Accepted

By: _____

Date: _____

MANUFACTURERS

- a. Acceptable Manufacturer: Mod-Panel Inc., which is located at: 6918 34 Street NW Edmonton, Alberta, CA T6B TXT; Email: (info@spraysulate.ca); Web: www.mod-panel.com

PANEL MATERIAL GENERAL

- a. Factory constructed 50 inch x 98 inch roof sandwich panel
- b. Effective R value: R20 {R30} (R40)
- c. Top Sheet: 3/8" Oriented Strand Board {1/2" Densdeck Prime} {Soprema Base Sheet}
- d. Insulation Core: Certified CCMC 2 lb medium density polyurethane insulation.
- e. Bottom Sheet: 3/8" Oriented Strand Board {1/2" Densdeck Prime}
- f. Acceptable Material: Mod-Panel MP-200

FASTENING PLATE

- a. Polyamide telescopic tube washer r insulation bracket supplied by Manufacturer
- b. Washer diameter: 2"-3"
- c. Depth of fastener plate and fastener screw to be provided by Manufacturer
- d. Acceptable Material: Mod-Panel PT-50

VAPOR BARRIER SEALANT:

- a. Synthetic and rubber sealant
- b. Wide service temperature range of -40°C (-40°F) to 120°C (250°F)
- c. Acceptable Material: LePage PL Acousti-Seal Vapour Barrier Sealant

PREPARATION:

- a. Coordinate with Manufacturer on type of roof construction to ensure top sheet is appropriate for membrane.
- b. Clean roof surfaces by sweeping, power washing or dry/wet vac.
- c. Remove water, snow, ice or frost and clean of dust and debris.
- d. Verification of Conditions: inspect with [Departmental Representative] [DCC Representative] [Consultant] deck conditions including parapets, construction joints, roof drains, plumbing vents and ventilation outlets to determine readiness to proceed.
- e. Remove wet areas and ensure deck surfaces are dry before introducing new insulation to level of removed areas.
- f. Use only dry materials

SAFETY REQUIREMENTS:

- a. Comply with requirements of Provincial/Territorial Occupational Health and Safety Requirements
- b. Comply with requirements of Workplace Hazardous Materials Information System (WHMIS)

INSTALLATION SPF ROOF PANEL:

- a. Verify roof dimensions prior to panels arriving to site.
- b. Ensure all surfaces are clean prior to installing the roof panel.
- c. Lay out roof panel using factory supplied layout plan and grid on site and stagger joints.
- d. Seal lap joint with LePage Acousti-Seal prior to installing lap joints together to provide continuous vapor barrier
- e. Fasten roof panel as per panel fastening pattern using approved self-tapping metal screws
- f. Install membrane to top of panel to make watertight as per manufacturer recommendations.

PROTRUSIONS

- a. Coordinate with mechanical Contractor/Engineer for location of penetration prior to installing roof panel.
- b. Install self-adhered vapor barrier membrane to roof protrusion and decking using primer to ensure adhesion and seal made to curb flange.
- c. Install necessary membrane detail terminations to make protrusions watertight as per manufacturer recommendations.

MECHANICAL EQUIPMENT INSTALLATION

- a. Coordinate with mechanical Contractor/Engineer for location of mechanical equipment prior to installing roof panel.
- b. Install self-adhered vapor barrier membrane to roof curb flange and decking using primer to ensure adhesion and seal made to curb flange and sandwich panel.
- c. Cut and install panel around roof curb and butt up against roof curb.
- d. Install necessary membrane detail terminations to make protrusions watertight as per manufacturer recommendations.

PARAPET CONNECTION

- a. At parapet edge, install self-adhered vapor barrier membrane to parapet wall and decking using primer to ensure adhesion and seal made to curb flange.
- b. Install parapet wall panel as per drawing layout and butt panel up to parapet wall.
- c. Using gap insulation, apply spray foam between panel and parapet wall.
- d. Install and carry membrane over roof eave and cover weather that will not introduce moisture into system.