

# ETHYLENE PROPYLENE DIENE MONOMER (E.P.D.M.) ROOFING

## SECTION 1 - ROOF DECKS

### 1.1 GENERAL

- .1 The roof deck provides the structural support for the roofing system. Roof decks shall be designed in accordance with the Alberta Building Code to support design and construction loading.
- .2 The surface of roof decks must be sufficiently clean, dry and sound to receive roofing materials, so proper adhesion and attachment may take place.
- .3 Where electrical conduits, fittings, bolts and plates project above the deck surface, a smooth substrate plane shall be provided to receive roofing materials. Correction to the substrate plane in the proximity of the projections must be addressed on an individual project basis.
- .4 Roof deck perimeters shall be structurally supported. Deck openings require additional structural framing to support and to prevent excess deflection of the surrounding decking.
- .5 For mechanically attached membranes, the roof deck type, thickness and structural attachment must comply with the membrane manufacturer's requirements for minimum fastener pull out values and fastener density.

Added June 30,  
2005

### 1.2 WOOD DECKS

#### 1.2.1 Dimensioned Lumber Decks

- .1 Dimensioned lumber decks may be constructed from sawn lumber, planks or ship lapped boards.
- .2 For uninsulated membrane design E.P.D.M. roofing systems, a mechanically fastened auxiliary leveling surface must completely cover dimensioned lumber decks.

Changed June 30,  
2005

#### 1.2.2 Sheathing Decks

- .1 Plywood and oriented strand board (O.S.B.) sheathing shall be manufactured for exterior application.
- .2 Fully adhered and mechanically attached E.P.D.M. systems may be installed directly to minimum 16mm (5/8") thick plywood or O.S.B. sheathing provided that the decking is secured with screws and plates as nailing is not permitted.

### **1.3 CONCRETE DECKS**

- .1 Cast-in-place and pre-cast concrete decks shall have a smooth dry surface and shall be adequately cured prior to roofing application.
- .2 Pre-cast concrete deck grout keys shall be grout filled.
- .3 The maximum differential height permitted without correction between pre-cast concrete deck members is 6mm (1/4"). Height differences greater than 6mm (1/4") but no larger than 19mm (3/4") shall be corrected using cementitious grout or fill feathered to a maximum slope of 1:50 (1/4"/ft.). When height differences exceed 19mm (3/4"), a topping coat shall be applied to correct the deck surface.
- .4 Above deck projections such as anchor bolts and plates shall be feather grouted to provide a smooth roofing substrate.

### **1.4 STEEL DECKS**

- .1 Steel deck flutes shall be reasonably free of snow, ice and debris, prior to E.P.D.M. roofing application.
- .2 Unsupported deck openings are restricted to a maximum dimension of 200mm (8").

### **1.5 STRAMIT DECKS**

- .1 Stramit is a structural and/or insulating panel manufactured from straw fibre in 50mm (2") or 64mm (2 1/2") thickness as roof deck and/or insulation.
- .2 Prior to re-roofing over stramit decks, ARCA Administration must be notified of the existing structural condition of the stramit decking.

### **1.6 DECK FILLS**

- .1 Water based cementitious insulating fills comprised of mixtures of cement/gypsum and insulation/vermiculite are not accepted decks for Warranty Certificate issuance.
- .2 Bituminous deck fills comprised of bitumen and vermiculite are accepted for Warranty Certificate issuance.
- .3 The finished surface of bituminous deck fills shall be smooth and uniform.