

Specifications for 16mm Multicell Panel System:

Supplying and Installation of 16mm thick “Coxwell” Multicell Polycarbonate sheet roofing for skylight: Manufacture of skylight system, a complete assembly of extruded cellular structure UV protected polycarbonate panels incorporated into a complete system. Coxwell Multicell polycarbonate panel system with 5 cells and 6 walls structure shall be uniform in colour with an integral Tight-Cell core. Panel width shall not be less than 900mm and having vertical standing seam at both sides with 15-20mm height to ensure best performance for wind uplift, Vibration, Oil Canning and Visual appearance. Panels shall be having min. 45-50 microns co-extruded, UV protected on top Layer (exposed to Sun) and min. 15 micron on other side, of approved colour/shade. Panels shall be of anti-reflective / softlite / antiglare type to prevent glare. Panels shall be fixed on existing (M.S. /S.S.) purlins with I-Shape notching aluminum system throughout the panels length (Cleat should be Locking/gripping standing seam at least one side of the panels) with polycarbonate U connectors to interlock the panels with snap on / click-on / grid lock mechanism to ensure maximum uplift capacity and PC End Cap, complete to make watertight skylight system. The U Value should not be more than 1.9 W/m²K. Panel shall have extensive aluminum U-Profile/Glazing bar for the ends.

Panels must satisfy Dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min. of 500 Hours as per ASTM G 155 or Equivalent test by any NABL Approved Labs.

Panels shall not have Yellowness Index as per ASTM E-313, Delta (DE) change should not be more than 10 when tested on a sample exposed to UV for 500 Hours as per ASTM G 155 or Equivalent test by any NABL Approved Labs.

The Panel Manufacture should have 3rd party test certificate of the following Panel Test to ensuring the quality of the panels:-

Test Methods or Equivalent

ASTM E-313	Yellowness Index
ASTM G 155	For UV exposed test
IS 14443	For Dart drop impact test
UL 94	For Flammability

The approved make product should have been installed in India at projects of minimum 3000 sq.mtrs and at least 6 to 8 years back. PO copy should be shown before approval of product.

Approve brand should have their own manufacturing plant, with the Manufacturing experience of minimum 9 to 10 years (For better Product Quality control & had been exposed to Indian weather for same years).