

Polyurethane Insulated Sandwich Panel

1. Material

1.1 The overall thickness of panel shall be 50mm / 75mm / 100mm thickness.

1.2 Standard effective width for roof panel shall be 1,000mm. According to architect's design, the width of wall shall be discussed.

1.3 The substrate

Both Surface shall be 0.5 - 0.8mm thick galvanized steel (GI)sheet applied by KSD 3520 or JIS G3302 SGCC Z12-27/ASTM A526 in Flat or corrugated shapes

1.4 Coating

The coating shall be PvdF(Kynar 500) or SMP(Polyester) in 20 – 55 micron thickness with follow standard(in case of PvdF Coating). The back side of skins shall be coated with Polyurethane foamable epoxy painte with 5+/-2 micorn.

Test Item	Test Method	Description	Test	Spec.
Gloss(60)	Gloss Meter	Max. 40%	Max. 40%	ASTM D523
D.F.T(micron)	Max. 24 micron	Max.24micron	Max.25micron	AAMA605
Pencil Hardness	Mitsubish UNI Pencil	Min HB	Min.F	AAMA605
Adhesion	35 °C x24hrs, 100/100	100/100	100/100	AAMA605
Humidity Resistance	100 °C RH, 35 °C x3000hrs	No Blister	Good	AAMA605
Salt Spray	5% NaCl x 35 °C x3000hrs	No Blister(Field) Max 1/32" Under Cutting(Edge)	Good	ASTM B117, D1654
Detergent Resistance	3% Detergent Waterx38 °C x72hrs	No Blister, No Visual change	Good	AAMA605
Impact Resistance	1/2" x 0.5Kg x 50cm	No Removal	Good	AAMA605
Abrasion Resistance	Falling Sand	20Min.	40Min.	ASTM 968-51
Solvent Resistance	-	No Blister, No Visual change	Good	AAMA 605
Weathering	45 °C, 5 years, 5E Max.		Good	AAMA605

1.5. Core Insulation

- 1.5.1. 50/75/100mm thick PU or Polyisocyanurate(P.I.R) shall be foamed in density of 40+/-5 Kg/m³ by Automatic Continuous Double Metal Line
- 1.5.2. The panel shall be produced through Double belt Conveyor with over 30 M length for full curing.

2. Panel's Properties

- 2.1. Panel's joint system shall be Boltless type(Hidden bolt after installation)
- 2.2. The panel shall have Sound Isolation property over 25dB accordance with KS F 4724-97 and insulation over 1.29 m²K/W(KS F 4724-97)
- 2.3. The panel should pass Incombustibility(Grade III) Test(KS F 2271-98)
- 2.4. Available Length : below 11,800mm
- 2.5. The Flatness of Wall panel shall be managed under 4/1000.