

HPA7781-S is made from fire resistant phenolic resin impregnated glass fabric.

Referred to BMS 8-226, Type II, Class3B, DP7781.

DESCRIPTION

- Self-adhesion to honeycomb core for sandwich panel application
- Short and simple curing cycle
- Excellent drum peel strength
- Medium tack and good drapability
- Various cure process (autoclave, vacuum bag oven)

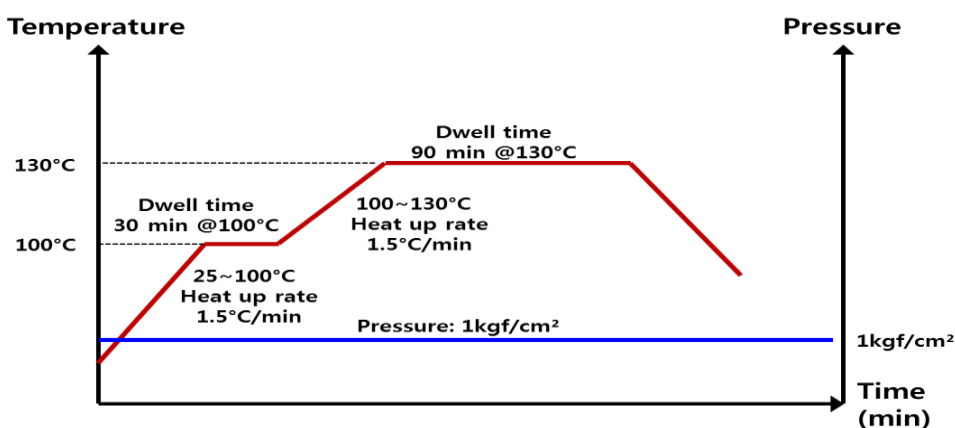
PHYSICLA PROPERTIES

Reinforcement

MATERIALS	PROPERTIES	VALUE	TEST METHOD
Glass Fabric	Style	181-77	-
	Weave	8 shaft satin	-
	Thickness (mm)	0.25 ± 0.025	-
	Fiber Areal Weight (g/m ²)	299 ± 18	BSS 7336 Method I
	Count (Count/in.)	Warp	57
		Fill	54
Glass Prepreg	Resin Content (%)	42 ± 2	BSS 7336 Method I
	Volatile Content (%)	Max. 7.0	BSS 7337 Method I
	Resin Flow (%)	25 ± 5	BSS 7335 Method I Type I
	Prepreg Gel Time (sec.)	170 ± 20	BSS 7276 Method II

CURING CYCLE

Typical Bagging cure cycle is shown as below.



PANEL PROPERTIES

Panel Lay-up Pattern

[(HPA7781-S 0°)² / Nomex Honeycomb]_s

Core

PROPERTIES	REQUIREMENT	REMARK
Thickness (mm)	8.86	Nomex Honeycomb Core (Hexagonal)
Density (lb/ft ³)	3	
Cell Size (in.)	1/8	

Mechanical Properties

PROPERTIES	VALUES	TEST METHOD
Drum Peel Strength (in.-lbf/3in.)	53-60	ASTM D 1781

Flammability

PROPERTIES	REQUIREMENTS	VALUES	TEST METHOD
60 sec. Vertical	Self-Extinguish Time (sec.)	< 5	BSS 7230 Method F1
	Burn Length (in.)	< 4.5	
	Drip Extinguish Time (sec.)	No Drip	

Heat Release Rate

PROPERTIES	REQUIREMENTS	VALUES	TEST METHOD
Total Heat Release After 2 min. (KW*min./m ²)	< 65	48.9	BSS 7322
Peak Heat Release Rate During the 5 min. Period (KW/m ²)	< 65	53.9	

Smoke Density

PROPERTIES	REQUIREMENTS	VALUES	TEST METHOD
Maximun Smoke Density during 4 min.	< 200	3	BSS 7238

SHELF LIFE

STORAGE TEMPERATURE	SHELF LIFE
Room Temperature 23°C	10 day
Frozen below -18°C	6 month