



General Description – YDB SS 180 XP

YDB SS 180 XP acoustic insulation material. It is made by melt blowing micro - fiber including diameter 1-4 micron superfine fiber (Polypropylene) and 20-30 micron staple fibers (Polyester). The product has good performances of acoustic insulation meanwhile; it has more characteristics as environmental, lightweight, hydrophobic, compressible, flexible installation etc. It is widely used in many fields, such as automobile, high speed train, tube project, ship, yacht, air plane, aviation & spaceflight, household appliance, office equipment, machine, laboratory, piano room, cinema, meeting room, building & decoration, equipment sound insulation, workshop etc.

General Construction

The web is composed of 50% polyester staple fibers, and 50% polypropylene fibers. The polypropylene fibers are extremely fine, producing the high-energy absorption characteristic with the low weight. The polyester fibers are added to strengthen the web. The scrim attached to both sides is a 100% polypropylene non-woven fabric.

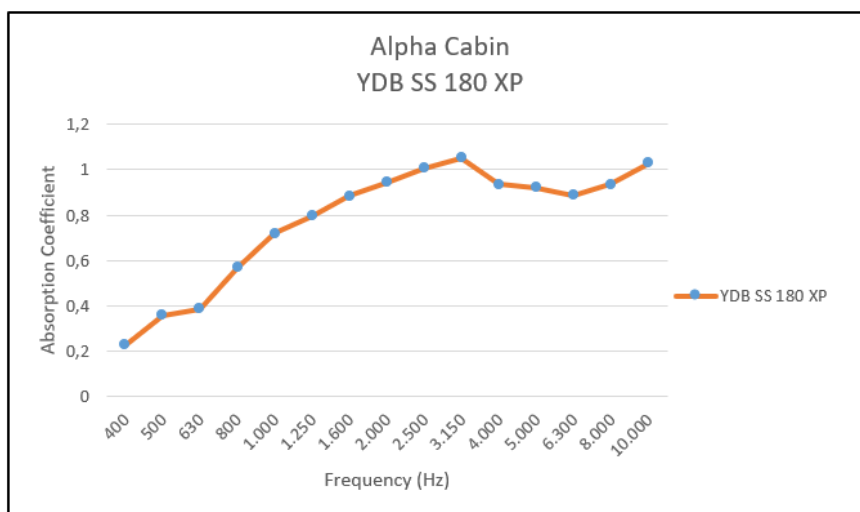
Special Characteristics

It is conformable to accommodate the irregular spaces behind trim panels, headliners and instrument panels. Fills voids to help reduce unwanted noise from travelling throughout the vehicle. It can be processed by conventional techniques such as die-cutting and heat sealing. Attaching to trim panels is recommended, preferably using ultrasonic or heat spot welding, but adhesives (transfer tapes or hot melt) may also be used. Not recommended for applications where temperatures will be above 120°C.

General Properties	
Composition Web	50% Polypropylene + 50% Polyester
Composition Scrim	Double side White Fabric (15gsm)
Color	Both sides white scrim
Material Thickness	21mm ± 2mm
Material Weight	180 ± 10 g/m ²
Density	8.0 Kg/m ³
Flammability	0 mm /min (A-0)
Heat aging	120°C for 2000 Hours
Tensile Strength	MD: 9.0-10.0 N CD: 10.0-12.0 N
Moisture Content	0.4 %
Heat Conductivit	0.032 W/m·K

Acoustical Properties – Alpha Cabin

Frequency [Hz]	YDB SS 180 XP
400	0,227
500	0,357
630	0,386
800	0,569
1.000	0,718
1.250	0,797
1.600	0,885
2.000	0,945
2.500	1,007
3.150	1,053
4.000	0,935
5.000	0,921
6.300	0,887
8.000	0,935
10.000	1,030



Acoustical Properties - Impedance Tube

Frequency [Hz]	YDB SS 180 XP
160	0,02
200	0,030
250	0,050
315	0,060
400	0,080
500	0,110
630	0,150
800	0,220
1.000	0,330
1.250	0,450
1.600	0,600
2.000	0,740
2.500	0,850
3.150	0,900
4.000	0,890
5.000	0,820
6.000	0,790

