



Grand Vertex Trading

Double Wall Fabrics

What is Double Wall Fabrics?

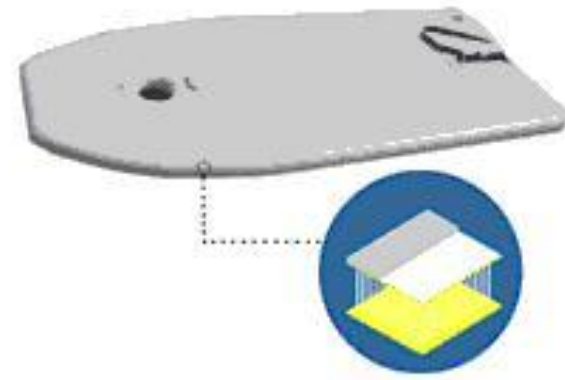
Coated double-wall fabrics for hollow structures

We provide double wall fabric, which consists of two fabric layers separated by a woven-in system of threads (50–200mm). The thread-linking system produces an extremely strong connection between the layers.



GVT's double wall fabric has an airtight PVC topcoat and may be adjusted individually according to customer specification:

- anti fungal
- UV resistant
- resistant to excrements
- different high-quality topcoats



Product width

- Regular width : 155cm, 205cm (Spacer : 70mm)
- Available width : min 155 cm ~ max 205 cm
- Unique supplier in Korea for the width 205 cm



Application

The double wall fabric can be classified into high tensile type and regular tensile type depending on application. And it can be used to various application depending on customer's needs.



High tensile type

Item : Drop Stitch 525T

Application : Boat Bottom, Air Surf Board, Air Mattress

Scope	Units	Test Method	Data	Remark
Weight	g/m ²	–	2,800 (±200)	
Spacer Length	mm	–	70 (±5)	50, 100mm
Tensile Strength	kgf/5cm	DIN 53352	180 * 200 (±20)	
Adhesion Strength	kgf/5cm	DIN 53354	20 * 20 (±2)	
Finish	–	DIN 53357	Matt	

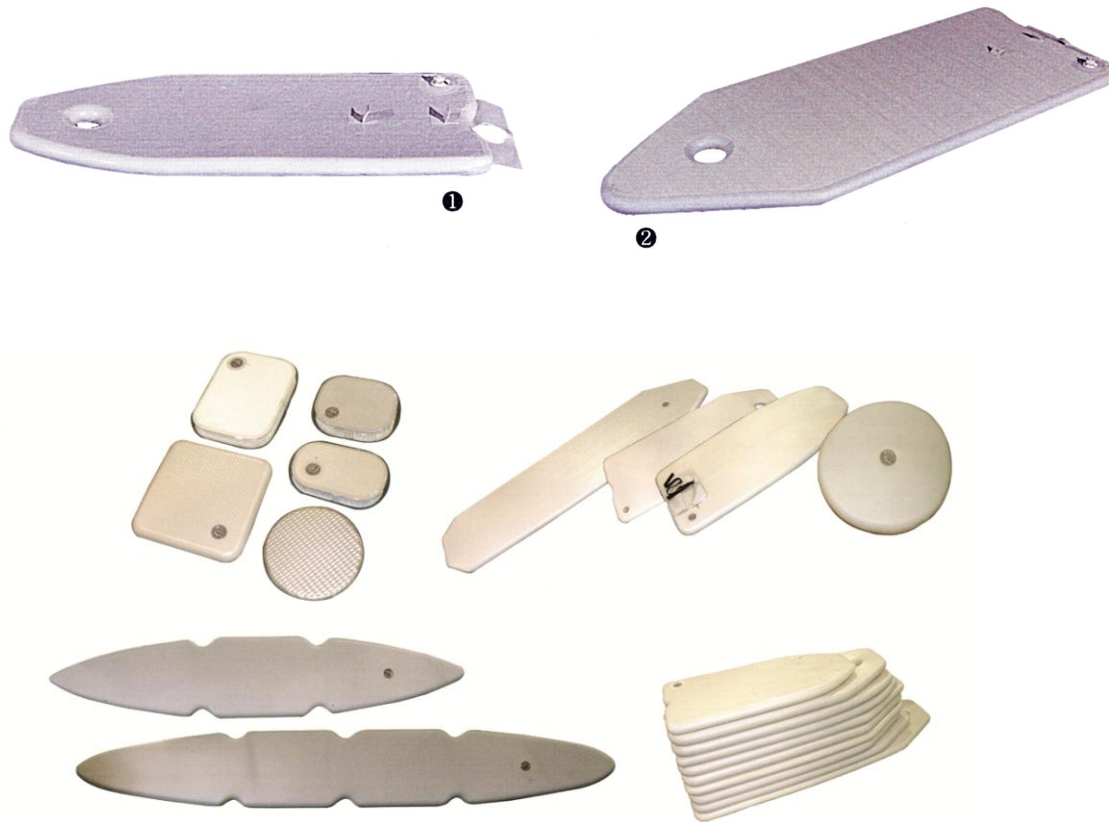
Inflatable Boat Bottom Fabrics

The double wall fabric take various effective than other wood or plastic floorboard.



- Very easy set-up
- Lightweight & portability
- Better safety by higher buoyancy than other floorboard.

Various Bottom Fabrics



Air Surf Board

Air surf board is so much lighter and easier to handle and carry than heavy product.

So, it make secure from handling and carrying than other bulky surf board.



Air Mattress

Suitable and comfortable mattress through controlling air pressure depending on customer's need.



Regular tensile type

Item : Drop Stitch 325T

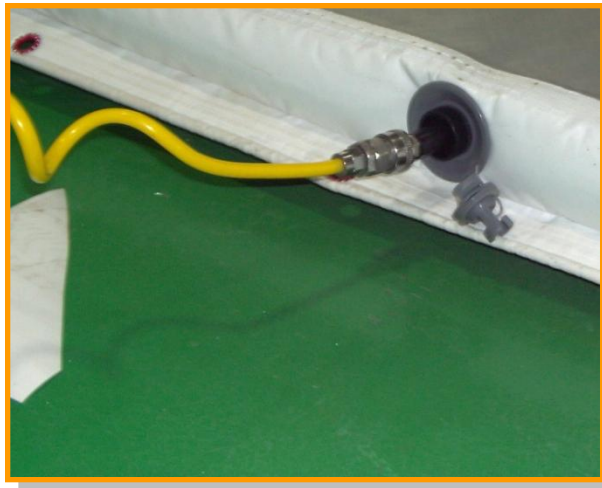
Application : Soundproof wall, Impact relax goods and other lightweight goods.

Scope	Units	Test Method	Data	Remark
Weight	g/m ²	–	2,200 (±200)	
Spacer Length	mm	–	70 (±5)	50, 100mm
Tensile Strength	kgf/5cm	DIN 53352	140 * 200 (±20)	
Adhesion Strength	kgf/5cm	DIN 53354	20 * 20 (±2)	
Finish	–	DIN 53357	Matt	

Lightweight & Potable temporary soundproof wall

It can be used as sound barrier
under construction area.

Lightweight and easy set-up.



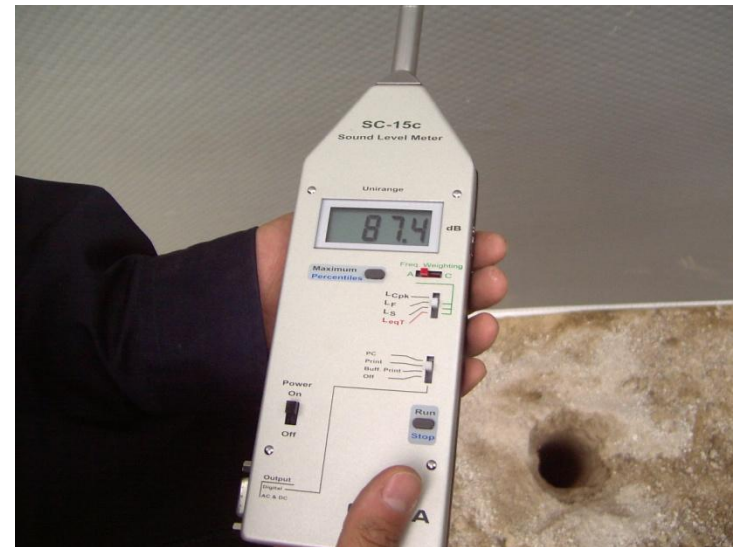
Noise test with soundproof wall

Before



Test result : 100.4 ~ 101.1dB

After

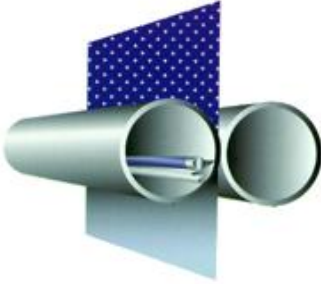
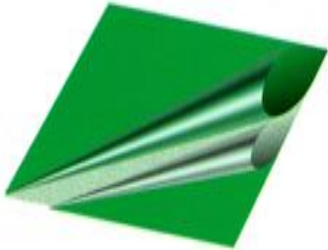


Test result : 87.4 ~ 87.6dB

Test result : Reduction about 13dB

Inflatable Boat & Pool Fabrics

Coating Process property

	Sol coating Process	Laminating Process
Process	 <p>Liquid PVC paste Direct coating to both side of Fabric (impregnation)</p>	 <p>PVC Film Heating & pressing each PVC film (non-impregnation)</p>
Product validity	Long	Short
Application	Various	Limited
Others	Difficult process High quality materials High end application	Easy process Low end application

Comparison of process

	Sol Process	Lami. Process
Durability	With complete liquid PVC penetration durability is great.	Because of imperfect adhesion between PVC film and fiber and numerous minuscule air spaces it has poor durability.
Flatness	Gradual, repetitive, thin-coating process yields flat-lie.	Lamination of rigid film and fiber irregular thickness cause incomplete flatness.
Dimension Stability	Less than 1%	3 ~ 10%
Thread-Straight	Less than 2%	3% ↑
Adhesion Strength	Excellent	Good
Chemical Resistance	Excellent	Good

Inflatable Boat Fabrics

1. Inflatable Boat Series

- 1) Inflatable Boat for Body : FAE-40(M) / PAD-31(M) / PAD-25(M) / PAD-20(M)
- 2) Inflatable Boat for Seaming Tape : PEM-15(M)

2. Physical Properties and Specification

In order to use materials of Inflatable Boat, the basic properties of PVC materials are as follows :

- 1) The physical properties endure air pressure (0.25 ~ 0.3 kg/cm²)
- 2) Good adhesion strength
- 3) Good Thread-Straight
- 4) Good Dimensional Stability

GVT BOAT FABRICS by Special Coating System have advantage of light weight, easier process, cold-resistance, heat-resistance, air-tightness, strong adhesion and UV stability.

Item : **FAE-40(M)**

Application : Sports, Rafting, Heavy duty Boat (body, under floor, etc.)

Specification	Units	Test Method	FAE-40(M)
Total weight	g/m ²	DIN 53352	1,350 (±50)
Tensile Strength	kg/5cm	DIN 53354	400×380 (±25)
Tear strength	kg	DIN 53356	35×25 (±5)
Adhesion strength	kg/5cm	DIN 53357	20×17 (±2)
Temp. Resistance	°C	MIL-C-20696	-40 ~ +70
Dimensional stability	%	24h at 70°C	< 1
Light fastness	-	DIN 54004	> 5
Thread-Straight	%	-	< 1



Item : PAD-31(M)

Application : Standard, Motor Boat (body , etc)

Specification	Units	Test Method	PAD-31(M)
Total weight	g/m ²	DIN 53352	1,050 (±50)
Tensile Strength	kg/5cm	DIN 53354	380×350 (±25)
Tear strength	kg	DIN 53356	10×20 (±5)
Adhesion strength	kg/5cm	DIN 53357	20×17 (±2)
Temp. Resistance	°C	MIL-C-20696	-40 ~ +70
Dimensional stability	%	24h at 70°C	< 1
Light fastness	-	DIN 54004	> 5
Thread-Straight	%	-	< 1



Item : PAD-25(M)

Application : Fishing , Light weight Boat (body, etc.)

Specification	Units	Test Method	PAD-25(M)
Total weight	g/m ²	DIN 53352	850 (±50)
Tensile Strength	kg/5cm	DIN 53354	380×350 (±25)
Tear strength	kg	DIN 53356	10×20 (±5)
Adhesion strength	kg/5cm	DIN 53357	20×17 (±2)
Temp. Resistance	°C	MIL-C-20696	-40 ~ +70
Dimensional stability	%	24h at 70°C	< 1
Light fastness	-	DIN 54004	> 5
Thread-Straight	%	-	< 1



Item : PAD-20(M)

Application : Light weight Boat (body, etc.)

Specification	Units	Test Method	PAD-20(M)
Total weight	g/m ²	DIN 53352	700 (±50)
Tensile Strength	kg/5cm	DIN 53354	380×350 (±25)
Tear strength	kg	DIN 53356	10×20 (±5)
Adhesion strength	kg/5cm	DIN 53357	20×17 (±2)
Temp. Resistance	°C	MIL-C-20696	-40 ~ +70
Dimensional stability	%	24h at 70°C	< 1
Light fastness	-	DIN 54004	> 5
Thread-Straight	%	-	< 1



Item : PEM-15(M)

Application : Seaming Tape

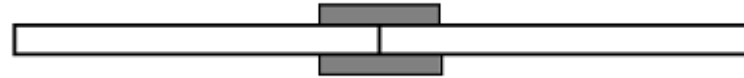
Specification	Units	Test Method	PEM-15(M)
Total weight	g/m ²	DIN 53352	520 (±50)
Tensile Strength	kg/5cm	DIN 53354	150×130 (±25)
Tear strength	kg	DIN 53356	5×5 (±2)
Adhesion strength	kg/5cm	DIN 53357	15×13 (±2)
Temp. Resistance	°C	MIL-C-20696	-40 ~ +70
Dimensional stability	%	24h at 70°C	< 1
Light fastness	-	DIN 54004	> 5
Thread-Straight	%	-	< 1



Adhesion Method

1. Glue

- Clean a adhesion part in MEK.
- Paint a adhesion part in Glue.
- Drying for 10 min at 60°C



2. Hot air welding type

These material are made from PVC material, which is the one of the Thermoplastic Polymer, therefore Hot Air Welding recommended for it application and welding speed for Hot Air system should be accorded with following table. In case welding condition is out of above range, the welding condition should be considered for each circumstance.



Pool Fabrics

It's available for various application like Swimming pool, pool linear, and various leisure goods.



Item : PAB-19(M)

Application : Swimming Pool, WaterPark

Specification	Units	Test Method	PAB-19(M)
Total weight	g/m ²	DIN 53352	650 (±50)
Tensile Strength	kg/5cm	DIN 53354	270×240 (±25)
Tear strength	kg	DIN 53356	20×15 (±3)
Adhesion strength	kg/5cm	DIN 53357	10×10 (±1)
Temp. Resistance	°C	MIL-C-20696	-20 ~ +70
Dimensional stability	%	24h at 70°C	< 1
Light fastness	-	DIN 54004	> 5
Thread-Straight	%	-	< 1



Other Applications

Air pool and bath room



Grand Pool



Swimming pool

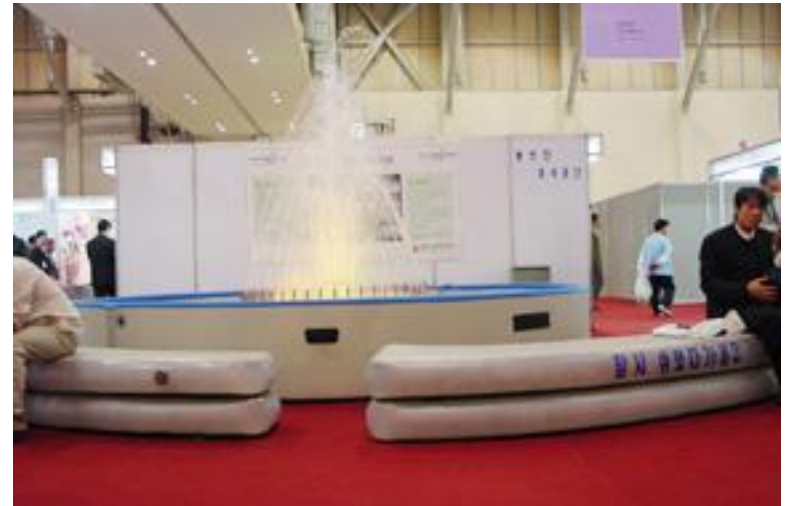
Air sofa



Ceremony air sofa



Super air sofa



Outdoor air sofa

Air tent



Mountain air tent



Water air tent

Urethane air mattress(1)



Government ship mattress



Hotel and special class room mattress



Leaving room mat



Passenger ship mattress

Urethane air mattress(2)



Urethane diversion of water



Indoor diversion of water



Outdoor diversion of water

Air structure



Advertisement air structure



Ssireum mat

High strength mat



Civil construction(1)



Civil construction(2)

Leisure mat



Water float



Military and emergency hospital mat(1)



Busan university hospital 1339 training mat



Government and military training

Military and emergency hospital mat(2)



Emergency field hospital



Air mat for patient

Military and emergency hospital mat(3)



Emergency cure(1)



Emergency cure(2)

Training and rescue mat(1)



Rescue operation mat

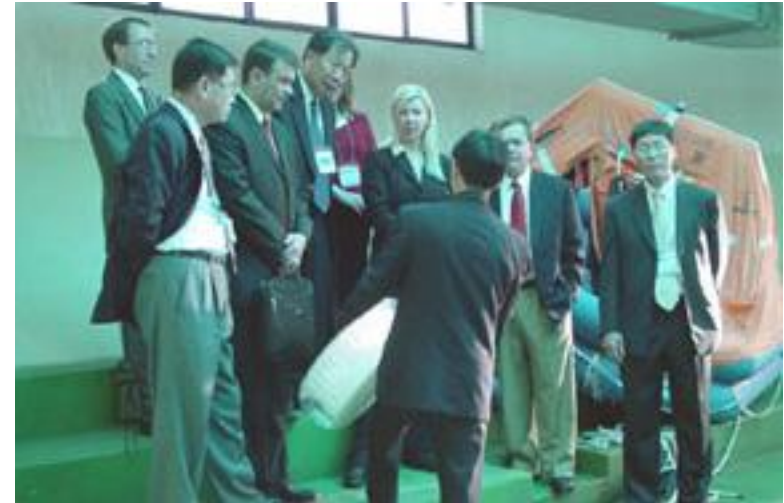


119 weight test(10 person)

Training and rescue mat(2)



Test training with foreign specialist



Explain for life saving mat

Training and rescue mat(3)



Rescue training



Buoyancy test

Training and rescue mat(4)



Transportation of patient



Appraisalment of training

Thank you

There are many varieties of application of DWF and custom design is also possible.