

## SIJIA Double Wall Fabric 思嘉空间布材料



### 公司简介 ABOUT US

SIJIA constantly provides new environmental protection material products and professional services to more than 100 countries and regions of the world, including modern transportation, medical, construction, outdoor sports and leisure, competitive sports and other 18 major industries, proposing different application solutions for the market.

SIJIA strictly follows ISO9001 Quality Control System. It builds an overall process Quality Assurance System (QAS) from raw materials, technical formula and quality monitoring to products delivery. Meanwhile, SIJIA invites the experienced European expert, who has fully improved R&D, technology, product quality, and ensures excellent and stable products to our clients.

With the most advanced production lines in the world and experienced professional technical team, SIJIA can produce the most suitable products based on different needs of customers.

思嘉为全球100多个国家及地区的现代交通运输、医疗、建筑、户外运动休闲、体育竞技等18大行业领域，源源不断地输送新型环保材料产品及专业服务，为市场提供不同的需求应用解决方案。

公司严格按照ISO9001质量管理体系运行，建立了从原辅材料进厂、工艺配方、在线品质监控到成品出厂全过程的质量保证体系(QAS)，同时，聘请欧洲资深研发专家为总工程师，对研发、技术、品质全面加强管理及提升，确保为客户提供品质优异、稳定的产品。

凭借全球最先进的生产线、经验丰富的专业技术团队，思嘉可根据客户不同的需求生产适合的产品。

#### 福建思嘉环保材料科技有限公司 FUJIAN SIJIA INDUSTRIAL MATERIAL CO.,LTD.

■ ADD: 福建省福州市晋安区宦溪镇思嘉工业园  
SIJIA Industrial Park, Huanxi Town, Jin'an District, Fuzhou, Fujian, China

■ WEB: www.sjiacn.com

■ TEL: 0591-87956888

■ FAX: 0591-87956333

■ EML: sijia@sjiacn.com

■ ZIP: 350012

#### 思嘉环保材料科技(上海)有限公司 SIJIA NEW MATERIAL (SHANGHAI) CO.,LTD.

■ ADD: 上海市金山区漕泾镇求真路8号  
SIJIA Industrial Park, No.8 Qiuzhen Road, Caojing Town, Jinshan District, Shanghai, China

■ TEL: 021-67256333

■ FAX: 021-67256098

■ EML: sales@sjiacn.com

■ ZIP: 201507

#### 福建思嘉新材料科技有限公司 FUJIAN SIJIA NEW MATERIALS TECHNOLOGY CO.,LTD.

■ ADD: 福建省福州市福清市新厝镇思嘉新材料科技产业园  
SIJIA New Materials Tech Park, Weiliu Road, Xincuo Town, Fuqing City, Fujian Province, China

■ TEL: 400-877-0877

■ EML: sijiatex@sjiatex.com



思嘉集团官网



思嘉集团公众号



思嘉新材公众号

Toughness 强 韧  
Lightness 轻 盈  
Smooth 平 整  
Safety 安 全





## Product Introduction / 产品介绍

SIJIA is providing a new material for the global market—SIJIA DWF (double wall fabric), which is with 3D hollow structure. By using 3D weaving technology, the two layers of base fabric are connected together with the pile yarns. Due to the different ways of the pile yarns, the surface shape of SIJIA DWF can be a pattern like wavy (w shape), starry, linear, and other surface shapes can be customized such as x shapes. Since each pile yarn thread has got the same length which define the maximum distance between the two base fabrics, SIJIA DWF keeping of the desired shape of the hollow body - a dimensionally-stable surface, smooth and excellent flexibility.

The 3D hollow structure gives SIJIA DWF lighter weight and better specific strength. The breaking strength of equally long pile yarns can reach more than 1Mpa (10 atm, 145PSI), so it is very safe to use, and not worry about the fracture problem of pile yarns completely.

The routine use pressure of DWF is under 20 PSI. With a special PVC airtight coated, the adhesion strength of SIJIA DWF can reach more than 150 N/5CM, so not worry about the ply separation or burst problem.

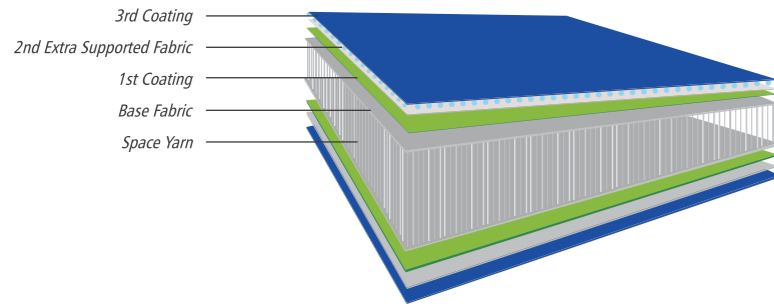
Keep exploring and developing customer-oriented products, SIJIA is committed to working with you together innovative product applications and design space.

思嘉正在为全球市场提供一种具有划时代意义的材料——思嘉空间布(简称“SIJIA DWF”),它是3D立体空心结构的。这种材料的基布采用3D编织技术,两层夹网布面通过中间拉丝的上下串并走法连接而成一体结构。中间拉丝的不同走法,SIJIA DWF可以形成不同形状的布面效果,如W状(波浪纹)、点状(满天星纹)、直条状(一字纹)等图案(根据客户要求,也可以订制其他非常规的布面效果,如X状、同一种形状,不一样的间隔效果)。由于每个拉丝纱线都是以设计好的固定行程连接两层夹网布,以定义材料的空间高度,因此,基于专门设计的拉丝密度,不管是哪种形状,SIJIA DWF都可以保证一个非常稳定的立体空间结构,表现为尺寸稳定、表面平整、回弹性好。

3D立体空心结构同时也赋予了SIJIA DWF比强度高的特性;长度一致的拉丝可以提供超过1Mpa(10 atm, 145PSI)的单位。断裂强力,因此,使用空间布材料是非常安全的,完全不必担心拉丝断裂的问题。

空间布材料的常规使用气压在 20PSI以下,思嘉空间布材料通过涂覆特制的PVC气密涂层,可以提供大于150N/5cm 的剥离强度,因此也完全不必担心可能出现的脱层或爆裂。

思嘉不断探索和开发适合客户需求的产品,致力于与您共同创新产品应用领域与设计空间。



By using 3D weaving technology, the two layers of base fabric are connected together with the pile yarns. SIJIA DWF can be formed into different surface shapes with dimensionally-stable, smooth surface and excellent flexibility.

思嘉空间布材料基布采用3D编织技术,两层夹网布面通过中间拉丝的上下串并走法连接而成一体结构,产品可形成不同形状的布面效果,尺寸稳定、表面平整、回弹性好。

## Product Characteristics / 产品特性

- 3D Hollow Structure:** Lightness, dimensionally-stable, provide unprecedented creative space for designers in the next 10 years.
- Smooth Surface:** The equally stress distribution, suitable hardness.
- Excellent Airtightness:** It can guarantee the normal use of more than 6 months after inflated one time under the worst beaches exposure environment.
- Isolation Ability:** It can easily achieve isolation, soundproof and other functions.
- Safety:** High tension strength, High tear strength, High stiffness give high compressive strength and obdurability, Durable that cloud folding resistance more than 10000 times.
- Market Competitiveness:** Cost-effective, Easy next procedure processing, Simple to use and easy to carry which suitable for all ages groups.
- Extra characteristics:** REACh, EN-71, RoHS, CPSIA, ASTM D963, UV resistance, Anti-chemical, Anti-bacteria, Anti-Mildew, Flame retardant and etc..

- 3D立体空心结构:** 质量轻、尺寸稳定,在未来10年为设计师提供前所未有的创意空间;
- 表面平整:** 应力分布均匀,硬度适宜;
- 气密性好:** 在最恶劣的沙滩暴晒环境下,一次充气,可以保证正常使用6个月以上;
- 隔离性能:** 可以很方便的实现隔离、隔音等功能;
- 安全性:** 抗拉强度高、撕裂强度高、高刚度,提供很高的抗压能力、强韧性,耐屈挠10000次以上,经久耐用;
- 极具市场竞争力:** 高性价比、后道加工容易、使用简单,携带方便,可适用于各个年龄段群体;
- 附加特性:** REACh、EN-71、RoHS、CPSIA、ASTM D963、抗UV、耐化学物质、防霉抗菌、阻燃等。

Items 项目	Test Method 检测方式	Unit 单位	Standard for Knitted DWF PVC经编型空间布指标		Standard for Woven DWF PVC平织型空间布指标		Standard for TPU DWF TPU型空间布指标	
			General 通用型	Reinforced 加强型	General 通用型	Reinforced 加强型	Knitted & General 经编通用型	Woven & General 平织通用型
Material Type 材料类型	/	/	DWF-G	DWF-R	DWF-G, Woven	DWF-R, Woven	DWF-U, Knitted	DWF-U, Woven
Base Fabric 基布类型			Knitted 经编		Woven 平织		Knitted 经编	Woven 平织
Base Fabric 基布材质	ISO 2076	/	100%PES		100%PES		100%PES	100%PES
Yarn Size (warp*weft*Space) 纱线型号(经纱*纬纱*拉丝)	ISO 2060	Denier	A*A*A		C*F*A		A*A*A	C*F*A
Space Piles Height 拉丝高度	ISO 2286-1	mm	30-300		30-500		30-200	30-200
Shape 拉丝纹路效果	/	/	Starry/Wavy/linear 点型/W型/直条型		Starry/linear 点型/直条型		Starry/Wavy/linear 点型/W型/直条型	Starry/linear 点型/直条型
Total Weight 克重	ISO 2286-2	g/m <sup>2</sup>	2400-2900	3300-3500	1800-2300-2600	2300-2600	2000-2800	1800-2400
Breaking Strength Warp 断裂强度 经向	ISO 1421	N/5cm	1800	3500	2700	5000	1800	2500
Breaking Strength Weft 断裂强度 纬向		N/5cm	2400	3800	4500	5500	2200	4000
Trapezoid Tear Strength Warp 撕裂强度 经向	DIN 53363	N	600	700	500	800	450	450
Trapezoid Tear Strength Weft 撕裂强度 纬向		N	500	700	700	1000	400	500
Adhesion Strength 胶的粘附力(剥离强度)	ISO 2411	N/5cm	150	200	150	200	150	150
Temperature Resistance 适用温度	DIN EN 1876-1	Degree(°C)	-30°C/+70°C	-30°C/+70°C	-30°C/+70°C	-30°C/+70°C	-30°C/+70°C	-30°C/+70°C
Recommended Pressure 建议充气压力	/	PSI	20	20	20	20	18	18
Max. Pressure 最大充气压力	/	PSI	30	30	30	30	25	25

- The above technical data are arithmetic averages with a permissible error of 5%. 以上技术数据为算术平均值,允许误差5%。
- The buyer shall be fully responsible for the application of the product or any third-party use of them. 买家对产品的应用或者他们任何第三方其他用途负全责。
- All the above data are provided as the best advice we can offer for the use of the product and should not be construed as a legal statement. 以上所有数据是我们能为产品的用途提供最好的建议,不作为法律声明。
- As our technology continues to improve, the product is also constantly being upgraded, and we reserve the right to modify the product features at any time. 随着我们技术的不断改进,产品也在不断升级,我们保留随时修改产品特性的权利。

## Application / 产品应用

- Water games and Sports Projects 水上娱乐与运动项目:**
  - Inflatable SUP Board(Air Surfboard) 充气直立式冲浪板
  - Waterplay and Sports Park 水上娱乐与运动乐园
  - Water Floating Row/Running Belt 水上浮排/跑步带
  - Water Recreation/Sightseeing Pavilion 水上休憩/观光亭
  - Inflatable Life Raft 充气救生筏
  - V-shape Inflatable Boat hull V型充气艇底板
  - Inflatable boat Stop cushion 充气艇停泊垫
- Sport Leisure Projects 体育休闲项目:**
  - Sports Fitness/Gymnastics Facilities (Air Gym, Air Track, Air Floor) 运动健身/体操设施 (充气体操垫、充气轨道、充气地板)
  - Inflatable Swimming/Baby Pool 充气游泳池/婴儿水池
  - Yoga Mat 瑜伽垫
  - Outdoor camping Mat 户外野营垫
  - Air bed 空气床
  - Inflatable Sofa 充气沙发
  - Air Car Mat 充气汽车坐垫
- Safety Protection facilities 防护安全设施:**
  - Fire Rescue/Escape Air-Cushion 消防救援/逃生充气垫
  - Flood Control Air Cushion 防洪气垫
  - Impact Cushioning/Buffer 冲击缓冲带
  - Sound Isolating Wall 隔音墙
  - Medical Bed 医疗床垫
  - Inflatable Lifting Bags 充放气升降袋
- Others 其他:**
  - Inflatable Tents stent 充气帐篷支架
  - Portable Advertising Display Wall 便携式广告展示墙
  - The Cow Mat 奶牛垫