佛山市三乐建材实业有限公司
地址：佛山市南庄镇里水镇和顺荣和工业区B区
邮编：528341
电话：0757-85102100
传真：0757-85102100
网址：www.fssanle.com

北京办事处
地址：北京市房山区良乡西晨大厦5单元903室

北京三乐建材有限公司
地址：北京市房山区良乡广安大街45号

FOSHAN SANLE BUILDING MATERIALS INDUSTRIAL CO., LTD
ADD: Heshun Industry Zone Phase B, Lishui Town, Nanhai District, Foshan City, Guangdong Province, China
Postal Code: 528241
Tel: +86(757)85102100
Fax: +86(757)85102100
Web: www.fssanle.com

北京办事处
ADD: Room 903, Unit 5, Xiuju Edifice, Liangxiang Town, Fangshan District, Beijing, China

Beijing Sanle Building Material Co., Ltd
ADD: No.45, Guangdao North Street, Liangxiang Town, Fangshan District, Beijing, China.

三乐建材
SANLE BUILDING MATERIALS

三乐纤维增强硅酸钙板
Fiber reinforced calcium silicate
从上世纪初开始，在抄取技术的运用下，建筑纤维水泥制品从石棉水泥瓦开始逐渐延伸到纤维水泥板和纤维增强硅酸钙板。如今，在人类追求环保、轻便、施工效率的更高要求下，三乐建材运用日益成熟的抄取技术，生产出正在向高密度高强度无石棉硅酸钙板及无石棉纤维增强外墙装饰板迈进！

佛山市三乐建材实业有限公司是三乐集团旗下的珠三角生产基地，主要产品为纤维水泥制品。公司积极引进日本、泰国等国家的纤维水泥生产制作技术。设有最先进的抄取生产线和200米全自动板材喷涂生产线，雄厚的技术力量，有统一的管理制度，统一的技术标准，统一的检测程序，先进的检测设备和系统的抄取技术及欧洲先进的表面处理工艺，确保了产品的优良品质。三乐品牌产品检测结果均符合国家标准，在市场上享有良好的声誉。

佛山市三乐建材实业有限公司已经成功打造出了中国优质的内外墙板、屋面材料等“三乐”绿色环保系列产品，主要包括：“三乐”牌硅酸钙板、外墙木纹挂板、外墙装饰板、纤维水泥板和彩色屋面水泥瓦等。

我们秉承“质量第一，信誉至上”、“用户至上，服务大众”的宗旨，欢迎国内外各界朋友来考察指导，洽谈购合事宜。我司愿与国内外各界精诚合作，共谋发展，共享收获，携手共创美好的居住环境！

从开始的去年末，由于使用了铝芯技术，纤维水泥板产品已扩展其范围，从纤维水泥板到纤维板和纤维增强硅酸钙板。现在的，人们需要更高质量的环保、轻便、施工效率的产品。我们的产品可制成不同密度的硅酸钙板和无石棉纤维增强外墙装饰板。

Foshan Sanle Building Materials Industry Co., Ltd. is the Pearl River Delta branch plant and production base of SANLE Group, one of the main products is fiber cement product. Our company has introduced advanced fiber cement production technology from Japan, Thailand and other countries. Our advanced automated fiber cement production line and 200 meters automated spray production line. Our products' quality is delivered by our powerful technical strength, integrated management system, integrated technical criterion, integrated testing procedure, and advanced testing equipment. SANLE's process and updated surface processing technology from Europe ensure that our products are completely of super quality in the market. In addition, all of our products conform to the national standards and own high reputation.

Foshan Sanle Building Materials Industry Co., Ltd. has successfully created China's excellent environmentally friendly series of products applied to interior and exterior wall, roof, floor and etc., including calcium silicate board, fiber cement siding board, decorative exterior wall panel, fiber cement board and colored roof tile, under the famous brand SANLE.

Our belief is “Excellent Quality, Credit Comes First, Customer Orientation, and Serve the Public.” We are always welcoming friends from all over the world here to visit our factory for commercial cooperation. We are willing to work with elites in all fields, to develop together. We believe that we can create a beautiful residential environment for your
产品应用范围
三乐硅酸钙板适用于各种工业与民用建筑物及办公楼、相对潮湿的场合做隔断，防火、隔音和吸音等用途。广泛用于办公楼、酒店、医院、厂房、学校、别墅、剧院及各类艺术建筑。

生产简介
三乐硅酸钙板的原料由高纯度石英粉，高标号水泥，高标号细动能，植物纤维及其他矿物添加物质组成。原料经自动配料、搅拌、模压、磨、锯、修边等工艺形成型材，后经高温高压蒸煮使其硅钙反应成“托贝变石”而硬化，其原材料处理到蒸煮后半成品加工，每一道工序均严格控制，保证提供品质稳定优良的通用硅酸钙板材。

符合标准
三乐硅酸钙板符合JCT 564-2008标准，产品严格控制内部产品质量考核标准，在吸水率，湿度及吸潮率方面均超过JCT 564-2008标准。

Features
- Environment friendly
  Sanle calcium silicate board is the 100% non-asbestos product. During using, our board will not produce any toxic gas and radiation.
- Fireproof
  Sanle calcium silicate board is fire resistance material. When fire happens, not only the place occurs the fire, but also the place fire spreads will be damaged and will bring loss, therefore, the fire resistance of outer wall is very important. Sanle calcium silicate board is with excellent fire resistance character. In addition, it will not cause crack and stratification after fire.
- Anticorrosive
  Sanle calcium silicate board is without any growth condition for fungus, and it will not be mildew in any circumstance.
- Resistant to insect and termite
  Under 11pa steam curing, the Sanle calcium silicate board is hardening, its own structural property decides that the insect and termite can not survive in the board.
- Light weight & high strength
  The wall, hang ceiling or other structural parts, which is made of board and profile, when using the calcium silicate board, it will be with superiority of light weight and high strength.
- Easy working
  The installation of board is dry construction, which is fast. It is can be installed with ordinary wood working tool. The board is easy to be processed.
- Easy decoration
  Various decorative processing can be made for the board surface, such as coating materials or all kinds of adhesive.
- Small deformation coefficient
  The materials of Sanle calcium silicate board are cement, quartz flour, natural xylem fiber and other minerals. Under high temperature autoclave, the calcium from the cement and the silica from the quartz flour will react to form a new crystal "tobermorite". It will harden within 24 hours after molding, therefore the shape of board is steady and deformation coefficient is small.
产品规格 Specification:

<table>
<thead>
<tr>
<th>宽度 (B) Width</th>
<th>长度 (L) Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>45, 6, 8, 9, 10, 12, 15</td>
<td>1220</td>
</tr>
<tr>
<td>2440,3000,3660</td>
<td></td>
</tr>
</tbody>
</table>

备注：可根据用户的要求生产其他规格的板材。

REMARK: we can also supply other specification as the customer's special requirement.

尺寸偏差 Tolerance dimension:

<table>
<thead>
<tr>
<th>项目 Item</th>
<th>长度 (L) Length</th>
<th>宽度 (B) Width</th>
<th>厚度 (E) Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 1200</td>
<td>≤ 1200</td>
<td>≤ 8</td>
</tr>
<tr>
<td></td>
<td>1200～2400</td>
<td>&gt; 1200</td>
<td>&gt; 9</td>
</tr>
<tr>
<td></td>
<td>&gt; 2400</td>
<td>&gt; 1200</td>
<td>≥ 0.3</td>
</tr>
<tr>
<td></td>
<td>≥ 1200</td>
<td>&gt; 1200</td>
<td>&gt; 0.5</td>
</tr>
</tbody>
</table>

形状偏差 Tolerance in shape:

<table>
<thead>
<tr>
<th>项目 Item</th>
<th>单位 Unit</th>
<th>要求 Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>边缘垂直度</td>
<td>mm/m Edge straightness</td>
<td>≤ 2</td>
</tr>
<tr>
<td>边缘垂直度</td>
<td>mm/m Squaredness</td>
<td>≤ 3</td>
</tr>
<tr>
<td>表面垂直度</td>
<td>mm/m Squaredness</td>
<td>≤ 3</td>
</tr>
<tr>
<td>厚度不均匀</td>
<td>% Thickness Uneven</td>
<td>≤ 6</td>
</tr>
</tbody>
</table>

物理力学性能 Physical properties:

<table>
<thead>
<tr>
<th>项目 Item</th>
<th>单位 Unit</th>
<th>要求 Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>密度 Density</td>
<td>g/cm³</td>
<td>&gt; 1.2</td>
</tr>
<tr>
<td>热导热系数 Thermal conductivity</td>
<td>W/(m·k)</td>
<td>≤ 0.29</td>
</tr>
<tr>
<td>吸水率 Water absorption</td>
<td>%</td>
<td>≤ 40</td>
</tr>
<tr>
<td>含水率 Water contain</td>
<td>%</td>
<td>≤ 10</td>
</tr>
<tr>
<td>蒸发率 Moisture movement</td>
<td>%</td>
<td>≤ 0.25</td>
</tr>
<tr>
<td>不燃性 Non–combustibility</td>
<td>GB8624 class A</td>
<td></td>
</tr>
<tr>
<td>抗折强度 Bending strength</td>
<td>MPa</td>
<td>≥ 12</td>
</tr>
<tr>
<td>抗弯强度 Bending strength</td>
<td>MPa</td>
<td>≥ 9</td>
</tr>
</tbody>
</table>

备注：如需产品的其他性能，请与公司产品技术部联系。

Remark: Please contact our technical department if you need more technical index.
加工方法

手工切割板材，可用一般的薄片锯或手锯完成。如大量板材需现场切割时，建议使用电锯圆盘切割机。切割锯片为平面的碳化钨合金制成，对不同截面的切割可采用电动曲线锯进行施工。

- 可用电钻或开孔器在板材上钻圆孔或方孔。
- 切割部位建议选择具有良好通风效果的地方。选用安全设备的切割器，工人应佩戴口罩，以保护环境及员工的健康。

Cutting

Board can be cut manually with common saws or handsaws. If a large amount of boards should be cut at the working site electric circular saws are suggested. The cutting saw blade is made of carbonized tungsten. Moreover, cutting round and arc-shaped boards can be done with electric curvilinear saws.

- Electric drills or taps can be used for circular or rectangular holes as needed on the board surface.
- Breazy spot is suggested as the site for cutting. In addition, cutters with the function of dust collection should be used, workers should wear respirators during processing, then the environment and health of the employees can be guaranteed.

隔墙安装:

1. 通常情况下，作隔墙的三乐硅酸钙板采用纵向排布，即板的长边落在上龙骨上；
2. 板对接时要自然靠紧，不得强行就位；
3. 特别注意门窗处板的排法，注意板缝不越在平行于门边柱，或窗边柱的龙骨上，以免由于门扇或窗扇的开关产生震动而造成板缝开裂；
4. 三乐硅酸钙板的两条长边都已倒角，如果墙体高于2400mm时，板水平接合的缝边必须现场倒角（即成宽度约25mm的斜边），以便更好的处理接缝；
5. 墙面非标墙面复层板，同时作预钻孔处理（孔径比螺钉头略大1~2mm，孔深1~2mm）固定点距板角40~55mm，固定点间距250~300mm。
6. 固定硅酸钙板，板与龙骨应做预钻孔，其孔径应比螺丝直径小1mm。用于固定时，应从板的中部向周边固定，且所有螺钉头均应沉入板面1mm。在紧固时，板材必须与龙骨紧接牢。

Guide of installation and application for partition:

1. Generally, Sanle calcium silicate board which is used for partition is installed in vertical. That is to say, the length edge should be installed on the C Profile.
2. The panels are supposed to be approached approximately naturally when they are installed. Forcible pressure should be avoided.
3. We have to pay special attention to the arrangement of panels near the windows and doors. The space of the panels should not be horizontal with the profile on frame of doors or windows in order to avoid the crack while shaking caused by opening or closing.
4. The two length edges of each panel are beveled edge. If the partition is higher than 2400mm, the shorter edge should be jointed horizontally on the spot (the bevel edges should be about 25mm in width) to make better sealing.
5. Snaplines and marking fixed points for the panels, afterwards making a hole in advance (1~2mm in diameter, slightly bigger than screw head, and 1~2mm in depth). The fixed point should be 40~55mm to the corner of the board and the space between the fixed points should be 250~300mm.
6. Before the panels are fixed, it should be holed in advance on both the board and the profile. The size of the hole should be 1mm smaller than the screw and tapping screw on diameter. As being installed, the board should be fixed from its center to edges, each screw Should be enter into the board by 1mm. When fixing, please tight the panels and profile.
Guide of profile installation for ceiling

1. First, we should draw the installation guideline to confirm the fixing position according to the draft and the indoor condition (the distance between the fixing points is ≤1222mm).

2. Fixing the main profile on the bottom of the floor horizontally with hanging wire and hanger, the central distance between the main profiles is ≤1222mm, while the space between the end of the profile and the partition should be 10mm.