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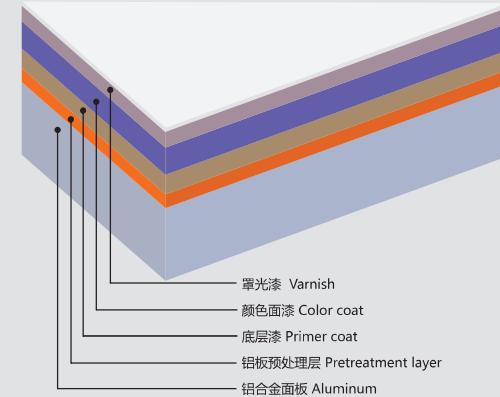


Version 2020.5

Architectural Aluminum



艺术铝板 Composing



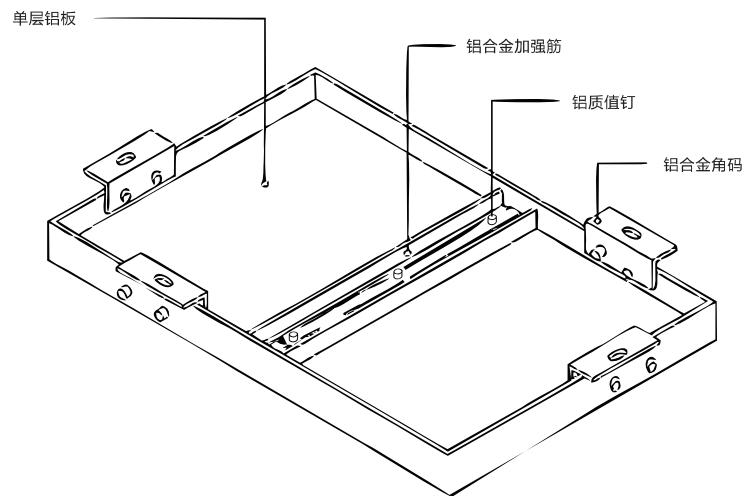
简介

WILLSTRONG® 艺术铝板采用优质高强度铝合金板材，其常用厚度为1.5mm、2.0mm、2.5mm、3.0mm;板材最大宽度在1900mm以内，最大长度在6000mm以内，型号为3003(或5052)，状态为H24。其构造主要由面板、加强筋和角码组成。角码可直接由面板冲压、折弯成型，也可在面板的小折边上铆装角码。加强筋与板面用电焊螺钉进行连接，使之成为一个牢固的整体，极大地增强了铝单板的强度与刚性，保证了铝单板在长期使用中的平整度及抗风、抗震能力。如果需要隔音保温，可在铝板内侧安装高效的隔音保温材料。

Introduction

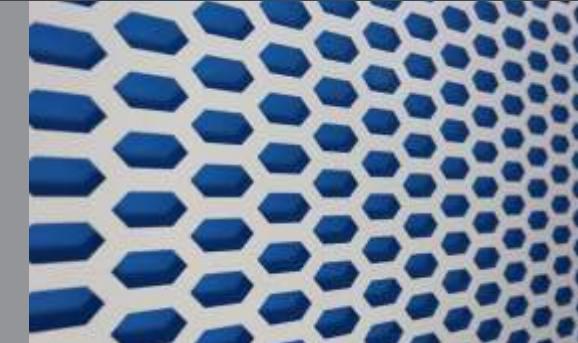
WILLSTRONG Aluminum veneer is made of high quality aluminum alloy3003 or 5052, in common thickness of 1.5mm, 2.5mm, and 3.0mm, with maximum width 1900mm, length up to 6000mm. The assembled plate contain aluminum veneer, stiffener and aluminum angle.

Aluminum angle can be made by cuttin from extruded profile and then fix on the folded edge by rivet. The stiffeners is usually fixed by bolting on the welded screw to strengthen the rigidity of aluminum panel and hence make contribution to the flatness during its long life span. To meet equirements of insulation to sound and heat, the inslutaion materials can be easily add to the back side of the panel.



艺术铝板的特点 Characteristics

- ① 重量轻，刚性好、强度高。3.0mm厚艺术铝板每平方重8KG，抗拉强度100-280N/mm²。
Light weight, high rigidity, high strength. The 3.0-mm thick aluminum veneer weighs 8KG per square and tensile strength 100-280N/mm².
- ② 耐候性和耐腐蚀性好。铝板采用kynar-500、hylar5000为基料的PVDF氟碳涂层可达25年不褪色。
Excellent resistance to weathering and corrosion. the coating of Kynar500, Hylar5000 offers 25 years color retention.
- ③ 工艺性好。采用先加工后喷漆工艺，铝板可加工成平面、弧型和球面等各种复杂的几何形状。
Good manufacturability. The aluminum plate can be machined into flat, arc type and spherical shape.
- ④ 涂层均匀、色彩多样。先进的静电喷涂技术使得油漆与铝板间附着均匀一致，颜色多样，艺术铝板选择空间大。
Even coating thickness, and numerous optional colors. Advanced spraying technology allows the paint to be sprayed on the aluminum surface uniformly. Full range of colors are available.
- ⑤ 不易玷污，便于清洁保养。氟碳涂膜的非粘着性，使表面很难附着污染物，具良好的可洁性。
Low maintenance. Thanks to the excellent performance of fluorocarbon resin, surface of aluminum can be easily cleaned by water.
- ⑥ 安装施工方便快捷。艺术铝板在工厂加工成型，施工现场不需裁切，固定在艺术铝板龙骨架上即可。
Installation is convenient and quick. The aluminum plate is processed in the factory.
- ⑦ 可回收再利用，艺术铝板有利环保。艺术铝板可100%回收，不同于玻璃，石材，陶瓷等装饰材料，回收价值高。
100% recyclable



艺术铝板的表面处理 Surface treatment

艺术铝板表面一般经过清洗、铬化等前处理，再采用氟碳喷涂处理。氟碳涂料分为底漆、面漆和清漆，主要成份为聚偏二氯乙烯树脂（KYNAR500或Hylar5000）。一般分为二涂、三涂或四涂。

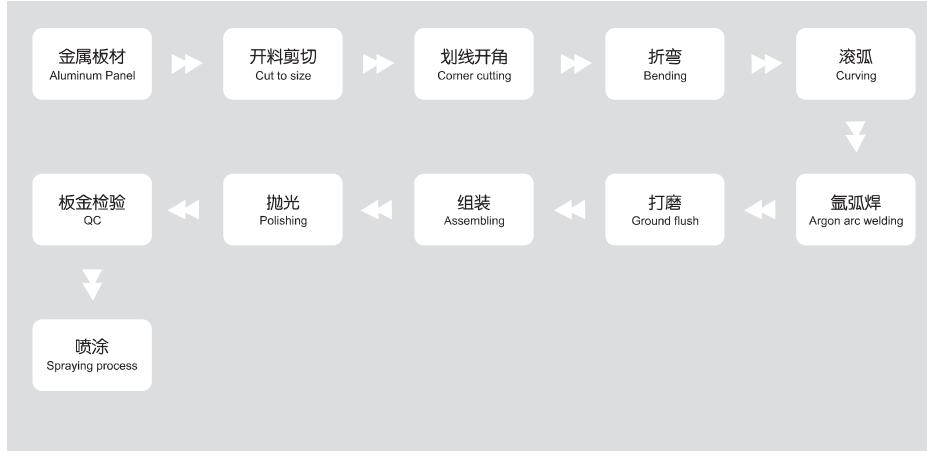
After cleaning, chromizing, the surface of WILLSTRONG aluminum panel will be coated with primer, color paint and then varnish. The main ingredients are polyvinylidene fluoroethylene resin (KYNAR500 or Hylar5000). And there are generally two, three and four coating layers according to specific requirements.

氟碳涂层具有卓越的抗腐蚀性和耐候性，能抗酸雨、盐雾和各种空气污染物等，耐冷热性能极好，能抵御强烈紫外线的照射，能长期保持不褪色、不粉化，使用寿命长。表面选用世界知名的氟碳涂料生产商PPG、DNT、AKZO、NIPPON等公司的优质氟碳涂料，颜色选择广泛，客户直接按厂家提供的色板选用或提供色板样。

Fluorocarbon coating has excellent corrosion resistance and weather resistance, and also good resistance to acid, salt, and all kinds of pollutions. And it also offer long color retention without chalking. We choose quality paint from the world known company such as PPG, DNT, AKZO and NIPPON etc.. and can provide numerous colors and custom colors.

钣金加工流程

Aluminum Machining



喷涂流程

Spraying Process



艺术铝板性能

Alloy and Property

铝合金型号 Alloy	抗拉强度 Tensile Strength	屈服强度 Yield strength	延伸率% Elongation	折弯内侧半(厚度为2mm) Minimum Bending Radius
A5052H24	230-280	180	5以上	R=2mm*2.5
A3003H24	210-265	180	4以上	R=2mm*2
A1050H24	100-145	180	4以上	R=2mm*1.5
A5754H24	220-270	180	6以上	R=2mm*1.5

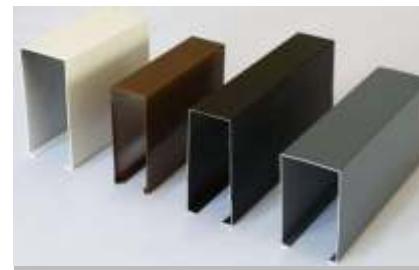
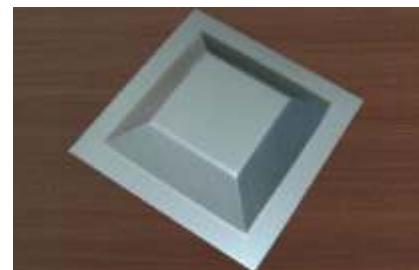
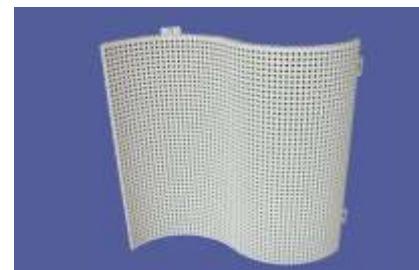
执行标准

Technical Data

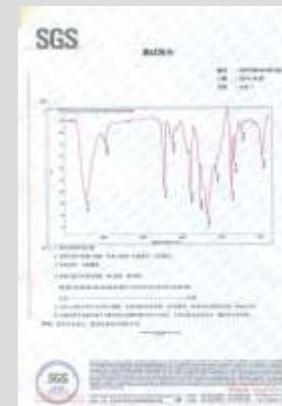
检测项目 Testing Item	检测内容 Testing Content	技术要求 Technical Requirements
几何尺寸 Geometry	基本厚度/mm Thickness	符合GB/T 3880.3 的要求 Meet the requirements of GB/T 3880.3
	边长/mm Length/mm	≤2000 , 室外允许偏差±2.0 , 室内允许偏差-1.5 ≤2000 , Allowable deviation ±2.0, Indoor Allowable deviation -1.5
	对角线/mm The diagonal/mm	>2000 , 室外允许偏差±2.5 , 室内允许偏差-2.0 >2000 , Allowable deviation ±2.5, Indoor Allowable deviation -2.0
	对边尺寸/mm The edge size/mm	≤2000 , 室外允许偏差≤2.5 , 室内允许偏差≤2.0 ≤2000 , Allowable deviation ≤2.5, Indoor Allowable deviation ≤2.0
	面板平整度/(mm/m) Panel flatness/(mm/m)	>2000 , 室外允许偏差≤3.0 , 室内允许偏差≤2.5 >2000 , Allowable deviation ≤3.0, Indoor Allowable deviation ≤2.5
	允许偏差≤2.0 Allowable deviation ≤2.0	≤2000 , 室外允许偏差≤2.0 , 室内允许偏差≤1.5 ≤2000 , Allowable deviation ≤2.0, Indoor Allowable deviation ≤1.5
氟碳涂层	涂层膜厚/ μm Coating film thickness/ μm	二涂≥30 μm , 三途大于等于40 μm , 四途≥65 μm Two coatings≥30um, Three coating≥40um, Four coatings≥65um
	附着力 Film adhesion	干式、湿式、沸水煮的划格法均为0级 Drying adhesion, wet adhesion, boiling adhesion water are all Class 0
	耐磨损性 Wear resistance	无变化 No change
	耐中性盐雾 Neutral salt mist	试验时间4000h不次于1级 Test time 4000h, not inferior to class 1
	耐湿热性 The wet and heat resistance	试验时间4000h不次于1级 Test time 4000h, not inferior to class 1
	耐人工候加速老化 Artificial weathering accelerated aging	试验时间400h, 色差≤3, 光泽保持率≥70%, 其他老化性能不次于0级 Test time 400h, chromatic aberrations≤3, gloss retention rate >70%, other aging performance is not inferior to class 0
	耐盐酸 Resistance to hydrochloric acid	无变化 No change
	耐硝酸 Acid Resistance	无起泡等变化, $\text{pH} \leq 5.0$ No bubbles, $\text{pH} \leq 5.0$
	耐砂浆性 Mortar resistance	无变化 No change
	耐溶剂性 Solvent resistance	丁酮, 无漏底 Butanone, no base exposed
耐候性 Weather Resistance	色差 Color different	10年后, 色差≤5.0 10years later, color difference ≤5.0
	光泽度 Gloss maintain	10年后, 保持率≥50% 10years later, retention rate ≥50%
	粉化 Chalking	10年后, 不次于4级 10 years later, not inferior to class 4
	光泽度偏差 Gloss deviation	光泽度<30 Gloss Value<30 30≤光泽度<70 30≤Gloss Value<70 光泽度≥70 Gloss Value≥70

艺术铝板部分造型实例

Shape



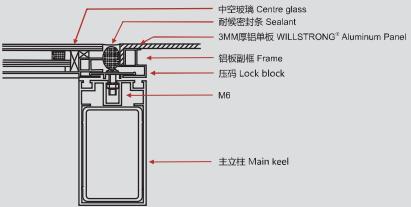
SGS检测报告 SGS Testing Report



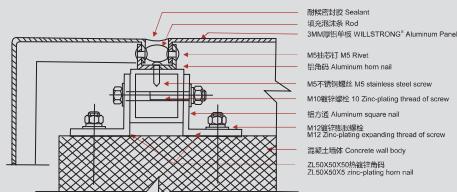
安装节点图

Installation

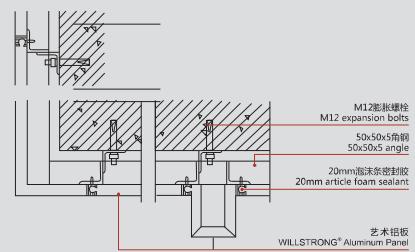
艺术铝板幕墙与幕墙相接的节点图
Joint-Aluminum Clad to Aluminum Clad



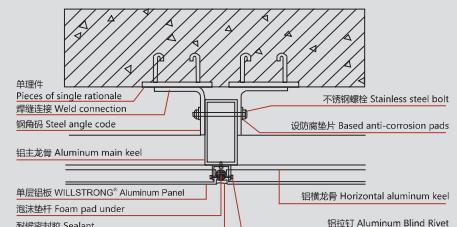
艺术铝板幕墙与玻璃幕墙相接的节点图
Joint-Aluminum Clad to Glass



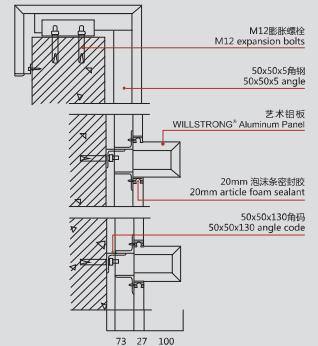
转角 Corner



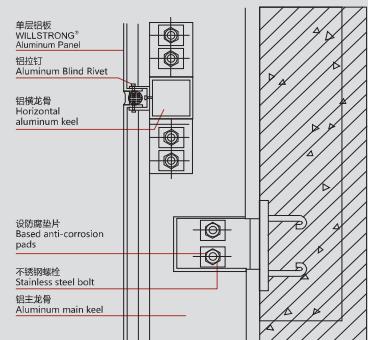
水平 Horizontal



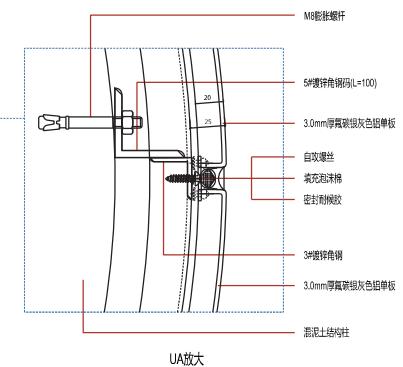
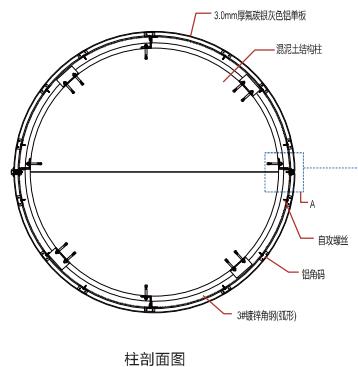
女儿墙 Parapet



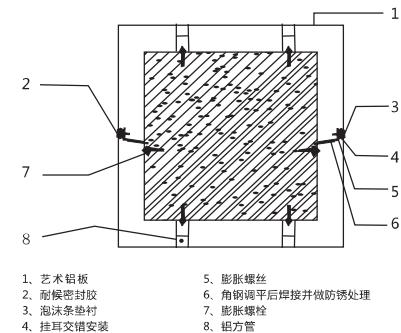
垂直 Vertical



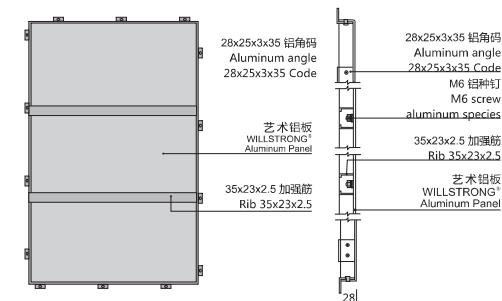
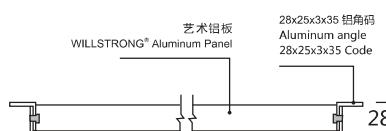
包圆柱安装实例
Package cylindrical installations



包方柱安装实例
Package square column installations

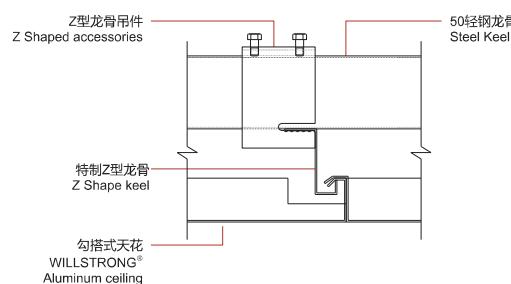
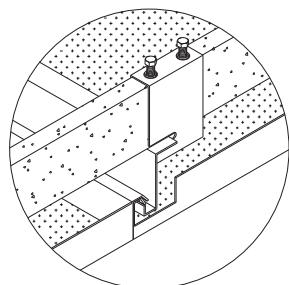
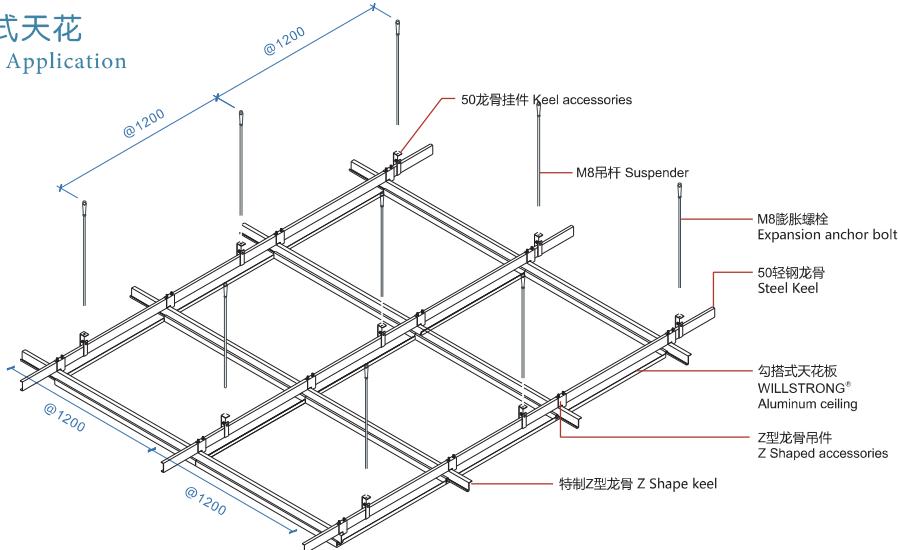


幕墙平面板块大样图
Large flat plate-like wall map

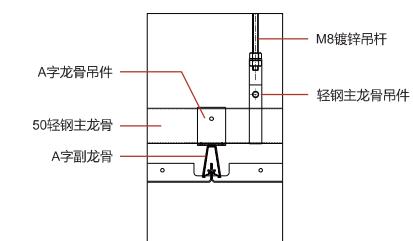
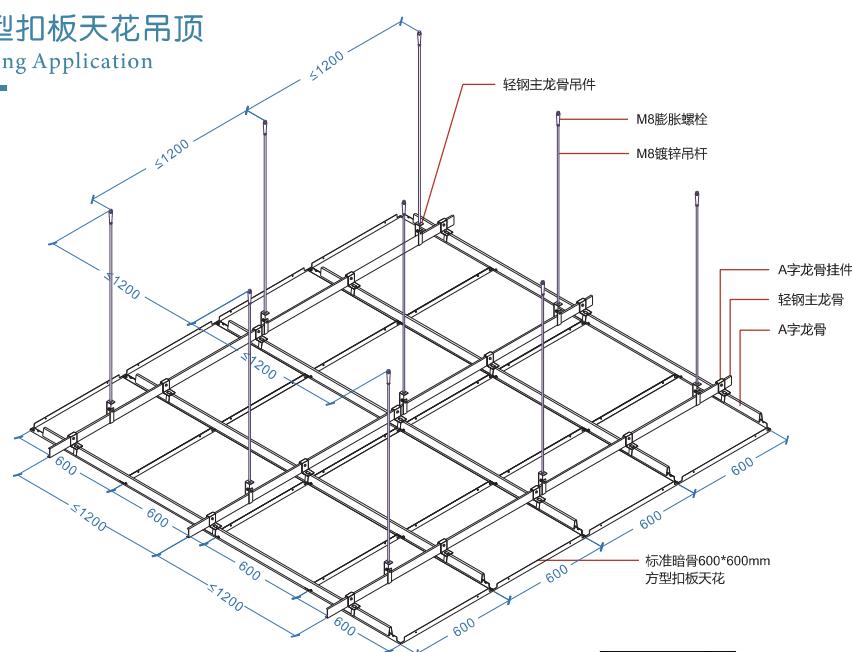


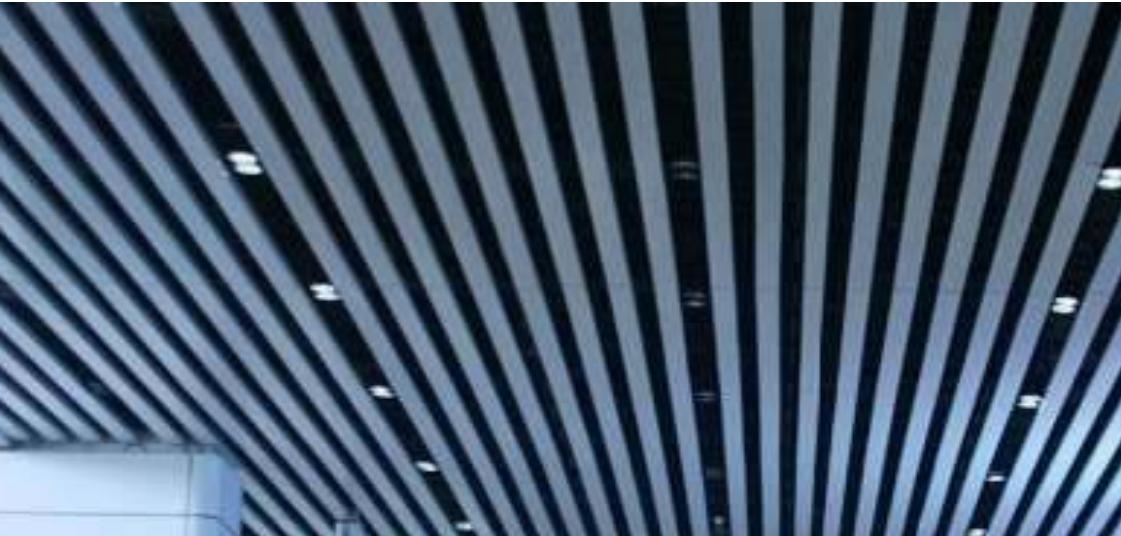


勾搭式天花 Ceiling Application

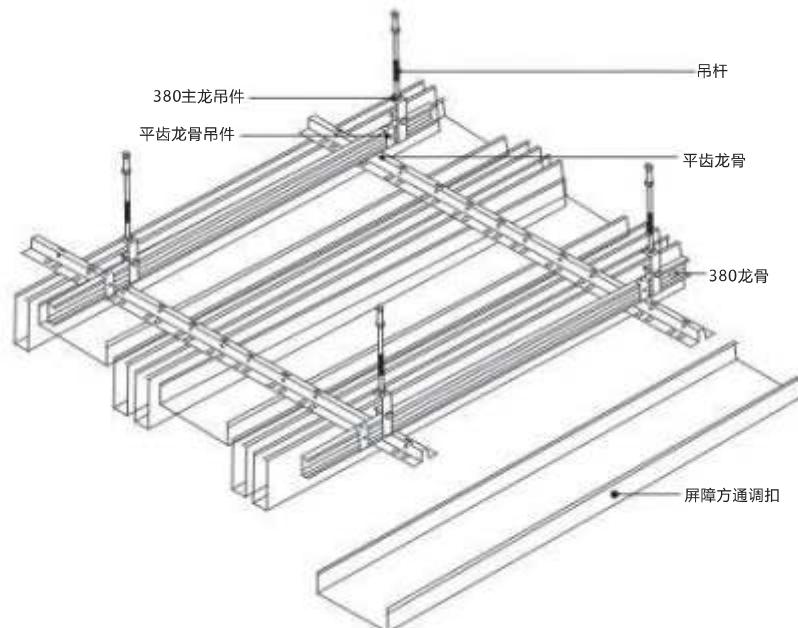


方型扣板天花吊顶 Ceiling Application

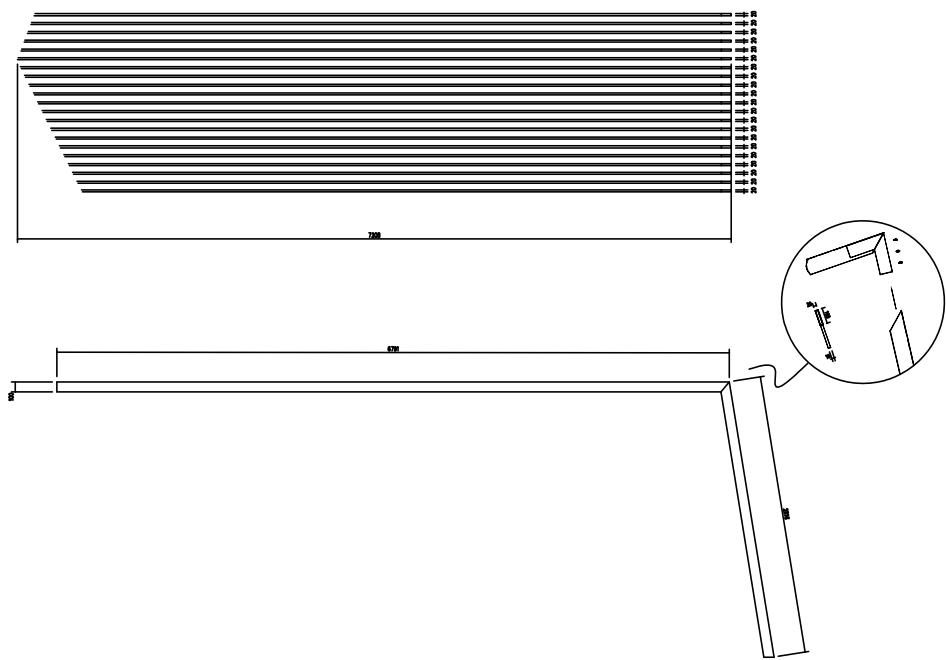


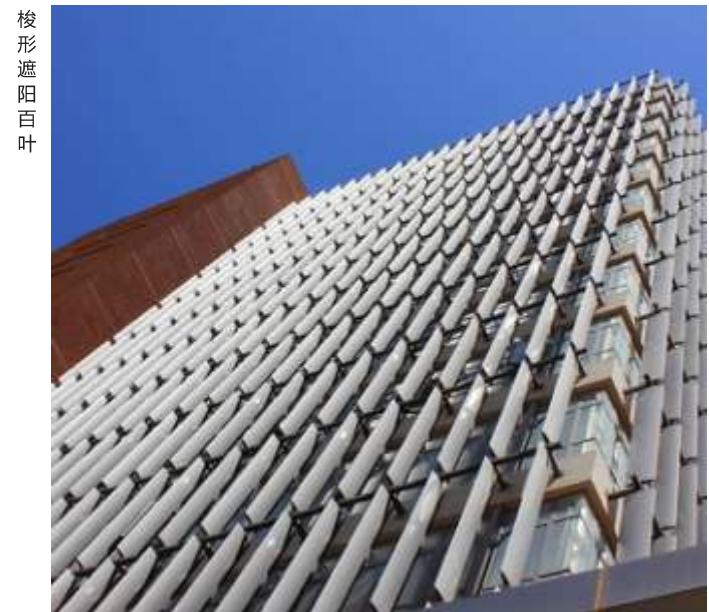


垂帘吊顶天花
Curtain Ceiling



铝方通
aluminum profile





冲孔机翼铝板遮阳



应用案例 Projects

