

# JUAL CHINA

## TPO/PVC 单层屋面防水配套件

WATERPROOFING PRODUCTS FOR TPO/PVC SINGLE-PLY ROOFING

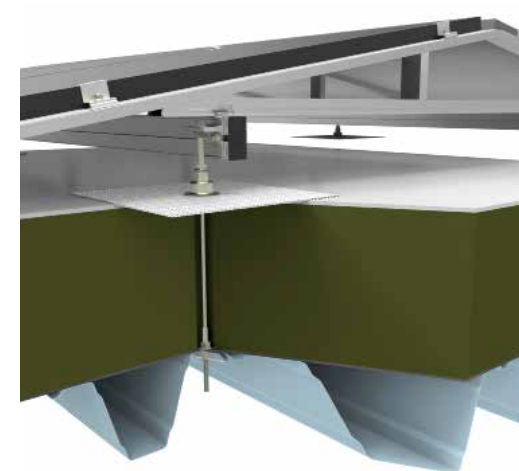


SINCE 1968



优尔金属制品（苏州）有限公司  
Jual Metal Products (Suzhou) Co., Ltd.

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2017

ROOFER'S CHOICE

欢迎来到优尔

WELCOME TO JUAL

## 50年 建筑行业的合作伙伴

优尔金属制品（苏州）有限公司成立于2004年，位于苏州工业园区，是由丹麦JUAL Holding A/S投资设立的外商独资企业，主要设计、研发和制造屋面落水系统、通风系统、光伏支架系统、绿色太阳能窗、屋面安全防护和其他客户定制产品。

JUAL Metal Products (Suzhou) Co., Ltd, located in Suzhou Industrial Park, was founded in 2004 as a WOFE of JUAL Holding A/S in Denmark. At our Chinese facility, we design and manufacture roof outlets, ventilations, solar console systems, solar windows, roof safety protection and customized products.

我们关注：

**Our focus:**

优尔苏州以技术创新，产品创新和服务创新为发展动力，以ISO9001及ISO14001管理体系为框架，以欧标TÜV认证及国内建筑规范为准绳，严格把控产品的质量，追求客户百分百的满意。

JUAL is a dynamic organization with focus on technologies, products and services; We frame our management with ISO9001 and ISO14001 systems; We design and manufacture our products based on European Standard TÜV principle and Chinese construction criterion. We are very serious on product quality and we strive for 100% satisfaction from our customers.

我们有近50名员工，他们是我们的核心竞争力，支撑着企业的不断发展。作为回报，我们致力于为员工的成长和发展搭建最好的平台。

In China we employ 50 employees, They are our core competence and support the continuous development of our company. In return, our mission is to provide the best platform for personal development of our employees.

优尔在获得商业成功的同时也积极履行社会责任。我们是联合国全球契约组织的成员，为推动经济社会的可持续发展贡献力量。

JUAL has been actively fulfilling social responsibility and is a proud member of UN Global Compact, which promotes the sustainable development of economy and society.



# JUAL 单层 屋面产品一览图

## SINGLE LAYER ROOFING PRODUCT OVERVIEW



**全面提升 TPO/PVC 防水卷材的系统可靠性**  
Improve system reliability of TPO / PVC waterproofing

- ①防水落水口 Drains
- ③防水避雷支架 Lightning
- ⑤防水通风管 Ventilation
- ⑦防水安全锚 Safety Anchor
- ②挡叶器 Leafguard
- ④防水穿线管 Cable Penetrations
- ⑥防水设备基座 Console



# 排水系列 Drainage System

从1980年开始,我们就研究出在工厂内将防水产品与排水金属管相结合的工艺。从最初的沥青烧合到各种复合防水材料的粘合,我们实现了在工厂内预制产品的目标,使得产品的现场安装变得快速和安全。

JUAL is a specialist in integrating all kinds of membranes in our factory, so the roofer can make a fast and safe installation on the roof.

落水口 Drain  
挡叶器 Leafguard  
密封件 Seal  
套接管 Extension Pipe  
金属雨水管 Metal Rain Pipe



## 0.1 MPa

排水产品使用的所有管道都由不锈钢STS316制作而成。焊接和漏水实验在0.1MPa的压力下进行,排水管壁厚超过欧标要求,足够抵抗强水流冲击所产生的压力。

All drain pipes are made of STS316, acid resistant fully welded stainless steel. Tested to be watertight by 0,1 mpa, which equals 1 meter water column. The thickness of the material also meet the demands in the standard and will resist the vacuum of a heavy water flow.



## 19.1 L/s

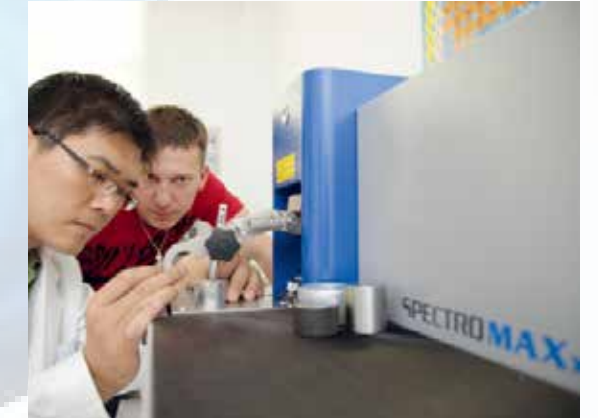
丹麦技术中心采用一些列实验,精确的模拟和测试排水性能,获取所有排水管及挡叶器的系统排水能力均有详细数据,并通过德国TÜV权威认证,最大排水能力高达为19.1L/S。

They are tested in our own Technology Centre in Denmark and verified by TÜV Rheinland in Germany. In our Technology Centre we are able to test the capacity of our drainage products with large accuracy. The maximum drainage capacity of the system is up to 19.1L / S.

## 8.3 ×

除了测试产品的排水能力,我们还对产品进行了“剥离试验”,客户防水卷材与排水系统金属法兰底座无缝焊接,焊接强度高达1.275kN/50mm以上,焊接强度是TPO防水卷材接缝剥离强度国标的8.3倍。

Peeling tests according to DS/EN-1253 are made on outlets with integrated membranes to verify the adhesion between the outlet flange and the integrated membrane.



## 5-10 min

排水系统产品安装便捷,安全高效,耐久实用。单人操作完全安装整套系统仅需5-10分钟,让单层屋面细部节点处理更简单、更高效。标准产品有各种不同的组合方式,可以满足大部分单层屋面的排水要求。同时,我们也可以根据客户的需要定制特殊尺寸的产品。

Drainage system product installation is very convenient, safe, efficient, durable and practical. JUAL drainage installed in 5-10 minutes, so that single-layer roof detail node construction is simpler and more efficient.



## 防水落水口 Drains

### 快速套插接无逆流、便捷焊接剥离8.3倍

Fast connection and easy welding, no countercurrent and difficult to peel

- ◆ 一体成型服帖，机床精度加工控制，质量稳定可靠，能抵抗强水流冲击产生的压力
  - ◆ 法兰预先固定，分散节点处集中应力，避免防水卷材反复拉扯，有效延长细部节点防水寿命
  - ◆ 金属底座法兰与客户防水卷材无缝焊接，焊接强度高达**1.275kN/50mm (TPO)**，是防水卷材接缝剥离强度的**8.3倍 (GB27789-2011)**
  - ◆ 插接密封件独特设计，确保落水口与排水管紧密安全无逆流的连接
  - ◆ 质量与美观俱佳，与大面防水卷材平整焊接，无针眼、无褶皱、无补丁
  - ◆ 单人即可操作施工，简便轻松，安全高效，完全安装**5-10分钟**即可
- ◆ Integrated designed, high precision control and withstand the pressure generated by strong water flow
  - ◆ Flange pre-fixed, decentralized concentrated stress to avoid repeated pull waterproof membrane
  - ◆ Coated metal and waterproofing material welding seamless, Welding strength 1.275kN/50mm
  - ◆ The plug-in seal is uniquely designed to ensure that the water outlet is tightly connected to the drain
  - ◆ Quality and beauty are superb, and large surface waterproofing membrane smooth welding, no needle, no wrinkles, no patch
  - ◆ Fast installation – only fastening and membrane welding required

## 挡叶器 Leaf guard

### 整流速排水 暴雨不积水

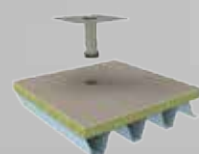
Integrated and rapid remove even if the storm is no water

- ◆ 整流作用，避免形成过大漩涡，迅速排除屋面雨水且有效阻挡较大杂物
  - ◆ 不锈钢板**AISI304**整块冲压弯折而成，具有铸铁和扁钢不可比拟的优点
  - ◆ 排水量大，重量轻，承载力高，整体强度高、抗冲击性能好
  - ◆ 简便快捷，安全高效，外形美观，经久耐用
  - ◆ 众多适配规格可供选择，力求最佳排水
- ◆ Avoid generating whirlpools, integrated and rapid remove water,
  - ◆ The whole piece of stainless steel is stamped and bended
  - ◆ Large displacement, light weight, high bearing capacity and high strength
  - ◆ Simple and quickly, safe and efficient, beautiful appearance and durable
  - ◆ Many of the adapter specifications to choose

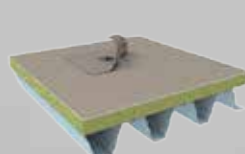


排水管及挡叶器的系统排水能力均有详细数据

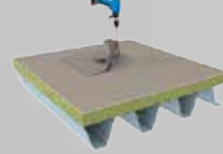
There is detailed data on drainage capacity of the Drains and leafguard



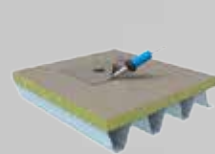
①插入预留口  
Insert the reserved port



②安装紧固件  
Install fasteners



③拧紧紧固件  
Tighten the fasteners



④焊接防水层  
Welding waterproofing

本产品是依据 DS/EN1253 标准开发、测试和认证的，该标准规定了落水产品的性能、构造和批量生产等现行要求，并通过德国 TÜV 产品质量安全认证。

This product is developed, tested, certified according to the DS / EN1253 standard by the German TÜV Rheinland-tested.

**TÜVRheinland®**  
Precisely Right.



# 防水避雷支架 Lightning

不增加节点 不破坏防水 圆扁均可装  
Do not increase the details and waterproof work

- ◆ 一体成型服帖，机床精度加工控制，质量稳定可靠，能抵抗强水流冲击产生的压力
  - ◆ 法兰预先固定，分散节点处集中应力，避免防水卷材反复拉扯，有效延长细部节点防水寿命
  - ◆ 稳固性好，承重能力强，侧向抗拉能力强，抗风负压能力强
  - ◆ 金属底座法兰与客户防水卷材无缝焊接，焊接强度高达**1.275kN/50mm (TPO)**，是防水卷材接缝剥离强度的**8.3倍 (GB27789-2011)**
  - ◆ 支架高度满足标准不小于**150mm**的要求，也可根据项目需求进行调节
  - ◆ 卡箍独特设计，用于多种避雷引线：圆钢 ( $\leq \phi 12\text{mm}$ ) 和扁铁 ( $\leq 40 \times 4\text{mm}$ )
  - ◆ 简便快捷，安全高效，质量轻，耐用性好，与建筑屋面同寿命
- ◆ Integrated designed, high precision control and withstand the pressure generated by strong water flow
  - ◆ Flange pre-fixed, decentralized concentrated stress to avoid repeated pull waterproof membrane
  - ◆ stability, strong load-bearing, strong wind resistance and negative pressure
  - ◆ Coated metal and waterproofing material welding seamless ,Welding strength 1.275kN/50mm
  - ◆ The height of the bracket can be adjusted according to the project requirements
  - ◆ Clamps are uniquely designed for a variety of lightning protection leads: round steel ( $\leq \phi 12\text{mm}$ ) and flat iron ( $\leq 40 \times 4\text{mm}$ )
  - ◆ simple and quickly, safe and efficient, beautiful appearance and durable



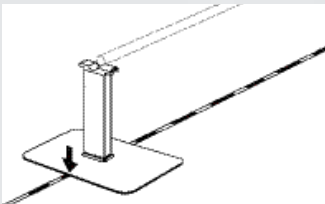
金属材质：不锈钢  
Metal Material: Stainless Steel  
防水材料：视具体项目定制（由客户提供）  
Waterproof material: depending on the specific project (provided by the customers)

压力 Pressure	拉拔力 Tension	圆钢侧向拉力 Lateral Tension (Round steel)	扁铁侧向拉力 Lateral Tension (Flat iron)
6217N	300N	653N	584N

本产品是依据 GB50057-2010《建筑物防雷设计规范》开发  
LCS is based on GB50057-2010 "building lightning protection design specifications"



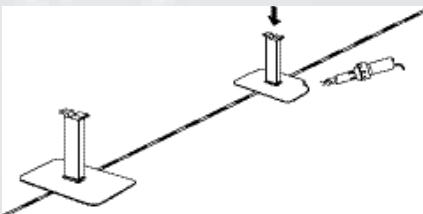
①拉线Pull line



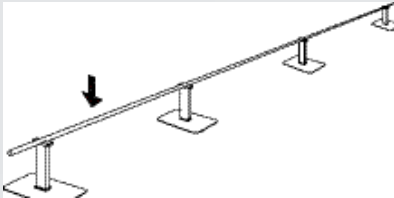
②定位Positioning



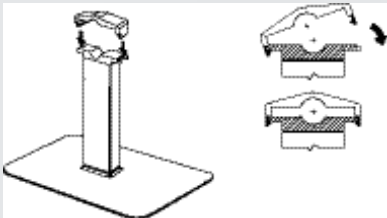
③热风焊接固定Welding fixed



④延线按序安装Install in order



⑤安装避雷引线Install the lightning rod



⑥安装卡扣Install the buckle



# 出屋面管道 Console

## 防水穿线管 Cable penetrations

### 经济快捷无隐患 Economic and Quickly

- ◆ 一体成型服帖，机床精度加工控制，质量稳定可靠，能抵抗强水流冲击产生的压力
- ◆ 法兰预先固定，分散节点处集中应力，避免防水卷材反复拉扯，有效延长细部节点防水寿命
- ◆ 金属底座法兰与客户防水卷材无缝焊接，焊接强度高达**1.275kN/50mm (TPO)**，是防水卷材接缝剥离强度的**8.3倍 (GB27789-2011)**
- ◆ 热缩闭口，穿线后有效闭合，不会发生回流
- ◆ 质量与美观俱佳，与大面防水卷材平整焊接，无针眼、无褶皱、无补丁
- ◆ 单人即可操作施工，简便快捷，安全高效简便轻松，安全高效，完全安装**5-10分钟**即可

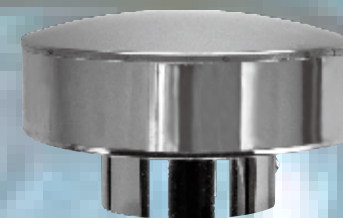
- ◆ Integrated designed, high precision control and withstand the pressure generated by strong water flow
- ◆ Flange pre-fixed, decentralized concentrated stress to avoid repeated pull waterproof membrane
- ◆ Coated metal and waterproofing material welding seamless ,Welding strength 1.275kN/50mm
- ◆ The heat shrinkable tube protects cables and prevents possible water ingestion due to heavy rain
- ◆ Quality and beauty are superb, and large surface waterproofing membrane smooth welding, no needle, no wrinkles, no patch
- ◆ Single person can operated, simple and quickly, safe and efficient



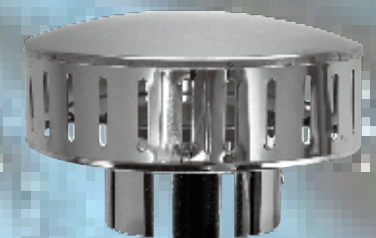
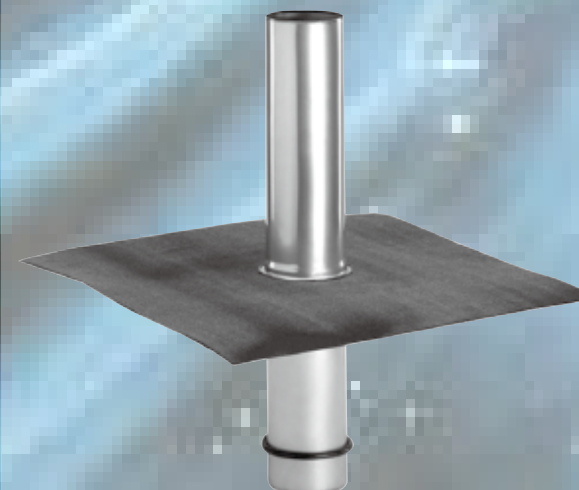
## 防水通风管 Ventilation

- ◆ 一体成型服帖，机床精度加工控制，质量稳定可靠，能抵抗强水流冲击产生的压力
- ◆ 法兰预先固定，分散节点处集中应力，避免防水卷材反复拉扯，有效延长细部节点防水寿命
- ◆ 金属底座法兰与客户防水卷材无缝焊接，焊接强度高达**1.275kN/50mm (TPO)**，是防水卷材接缝剥离强度的**8.3倍 (GB27789-2011)**
- ◆ 质量与美观俱佳，与大面防水卷材平整焊接，无针眼、无褶皱、无补丁
- ◆ 出屋面管道内套接或双管插接，简便快捷、安全高效

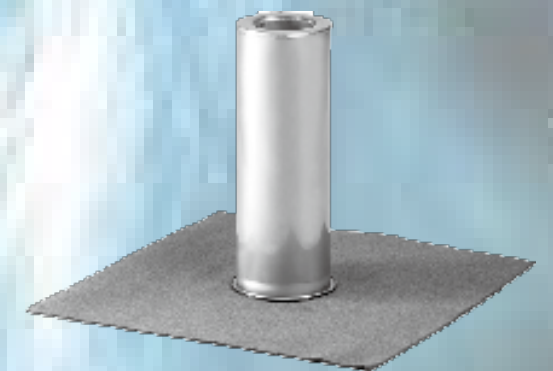
- ◆ Integrated designed, high precision control and withstand the pressure generated by strong water flow
- ◆ Flange pre-fixed, decentralized concentrated stress to avoid repeated pull waterproof membrane
- ◆ Coated metal and waterproofing material welding seamless ,Welding strength 1.275kN/50mm
- ◆ Quality and beauty are superb, and large surface waterproofing membrane smooth welding, no needle, no wrinkles, no patch
- ◆ Internal or double tube plug, simple and quickly, safe and efficient

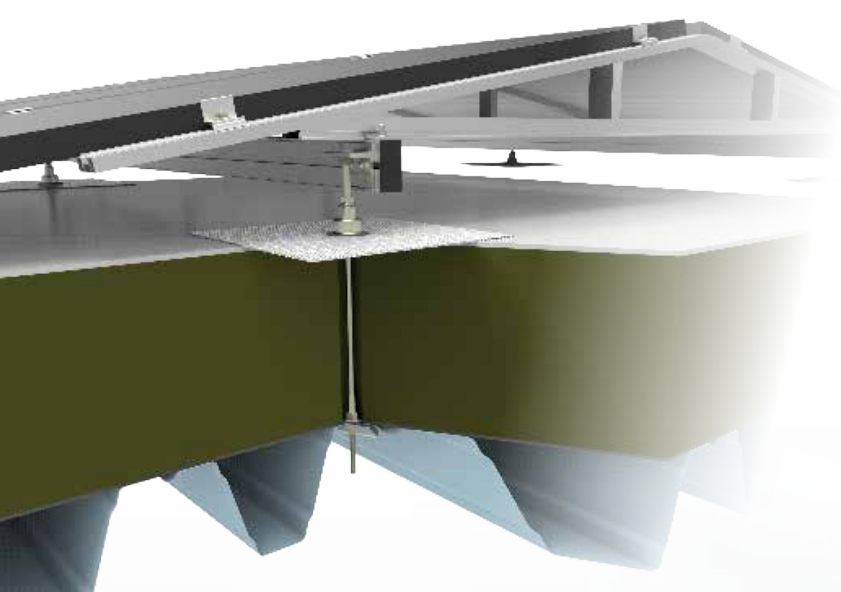


无孔不锈钢  
Rain Safe Version



有孔不锈钢  
Normal Version





太阳能电池板  
Solar



屋顶大字标牌  
Building characters



屋顶空调机组  
Air conditioning units



屋顶天线组  
Antenna group



屋顶设备平台  
Equipment platform

# 防水设备基座 Console

## 无缝焊接

金属底座与客户防水卷材焊接，焊接强度高达 **1.275kN/50mm**  
High quality imported coated metal combined with customer's waterproofing material



## 压环锁水

防水锁边压环，阻止汇水，寿命长久  
Thoroughly tested and durable materials used for long life



## 无冷热桥

**POM** 高差可调设计，不会因穿透保温而产生冷热桥  
Non-metallic spacer can be adjusted to various insulation thicknesses and prevents hot and cold bridges



## 自重锁扣

单向 **90°** 自锁扣件，上下旋紧，牢牢的卡住屋面结构板  
Special designed toggle anchor for optimal fixation into steel decks



## 导水排水

小巧端头杜绝影响屋面整体排水性能  
Narrow top design ensures that water flow is not obstructed



## 高强性能

系统抗拉强度 **1.5kN** 至 **3.5kN**，而基座比系统最少高出十倍安全系数  
Max pull capacity in a typical steel deck is 1,50 to 3,50kN. Console strength is min 10x higher!

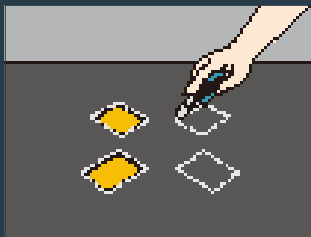




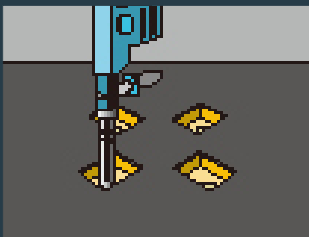
# 防水安全锚 Anchor

德国TÜV质量安全认证  
TÜV DS/EN795:2012-07 (D)

动态拉力	9.18kN
Dynamic tension	9.18kN
静态拉力	12.24kN
Static tension	12.24kN



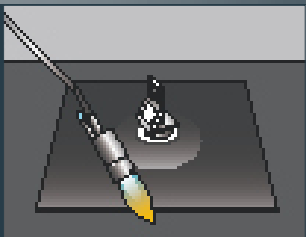
裁切保温棉  
Cutting Insulation



钻固定锚安装孔  
Drilling Fixation Hole



安装固定锚  
Installing Anchor



焊接防水层  
Welding Membrane



安装完成, 准备使用  
Ready to Use

