

System 450

Typhoon Proof Double Hook-on Plank Ceiling



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A unique designed exterior ceiling system takes in consideration of typhoon, de-mountability and site safety with German engineering back-up by "Suckow & Fischer".



Brief Specification

Part 1 - INTRODUCTION

"Suckow & Fischer" is a German branded product. "Suckow & Fischer" System 450 – Typhoon Proof Double Hook-on Plank Ceiling System is the most distinctive and heavy-duty system for exterior application. The system is sound and structurally rigid and reliable. The system does not require welding of metal sub-frame on site and it has successfully completed Wind Pressure Tests for severe storm conditions.

Part 2 - PRODUCT

2.1 Suspension System

2.1.1 Primary Structural Profile

The Primary Structural Profile, 'DP 26' Bridging Channel is made of galvanized steel in 50x50x50mm and 3.0mm thick, 5M length per piece. The primary structural profile is suspended with GMS M9 threaded rods or galvanized steel hangers by means of bolts and nuts at a maximum distance of 1000mm c/c. The maximum span of the primary structural profile shall not exceed 1000mm c/c (as per Manufacturer's recommendation), to provide heavy-duty loading for the system.

2.1.2 Secondary Structural Profile

The Secondary Structural Profile, 'DP 45W' Double Hook-on Profile in 45x70x 45mm is made of 2.0mm galvanized steel, 3M length per piece. The profile is fixed to 'DP 26' by means of GMS M6 bolt and nut at a maximum distance of 1500mm c/c distance to support the ceiling panels (as per Manufacturer's recommendation).

2.2 Ceiling Panels

The ceiling panels can be fabricated in various sizes and thickness (from 1.5mm to 2.0mm) depending on the design requirements with an optional choice of 3mm black foam gasket. The ceiling panel is fabricated with double-bent hook on panel ends, with square edges to hook onto the 'DP 45W' Double Hook-on Profile. The ceiling panel end shall have a 25mm continuous groove line adjacent to panel end to form a harmonious ceiling surface. Each panel shall be securely locked with a Typhoon Proof Clip 'WB 45/15' to withstand wind pressure and suction. Recommended panel sizes are : 300x1500mm, 400x1200mm, 450x1200mm and 400x1500mm c/c (as per Manufacturer's recommendation).

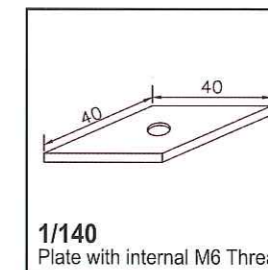
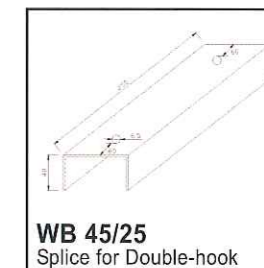
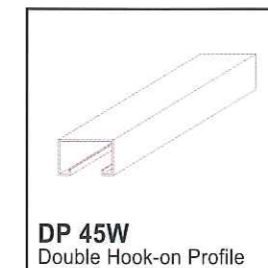
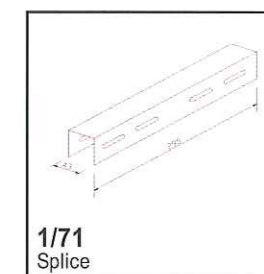
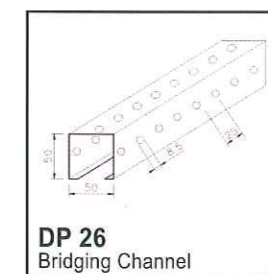
2.3 Base Material & Finishes

Base material of the ceiling panels can be aluminium or electrolytically galvanized steel coated in polyester powder finish in standard white RAL 9010 with minimum of 60 micron thick or other RAL colours. Optional coating finishes of polymer stove-enamelled or PVDF pre-paint or post-paint processes are available upon request.

PART 3 - WALL ANGLE & PERFORATED PATTERN

Please refer to "Suckow & Fischer" Metal Ceiling Technical Brochure.

Accessories



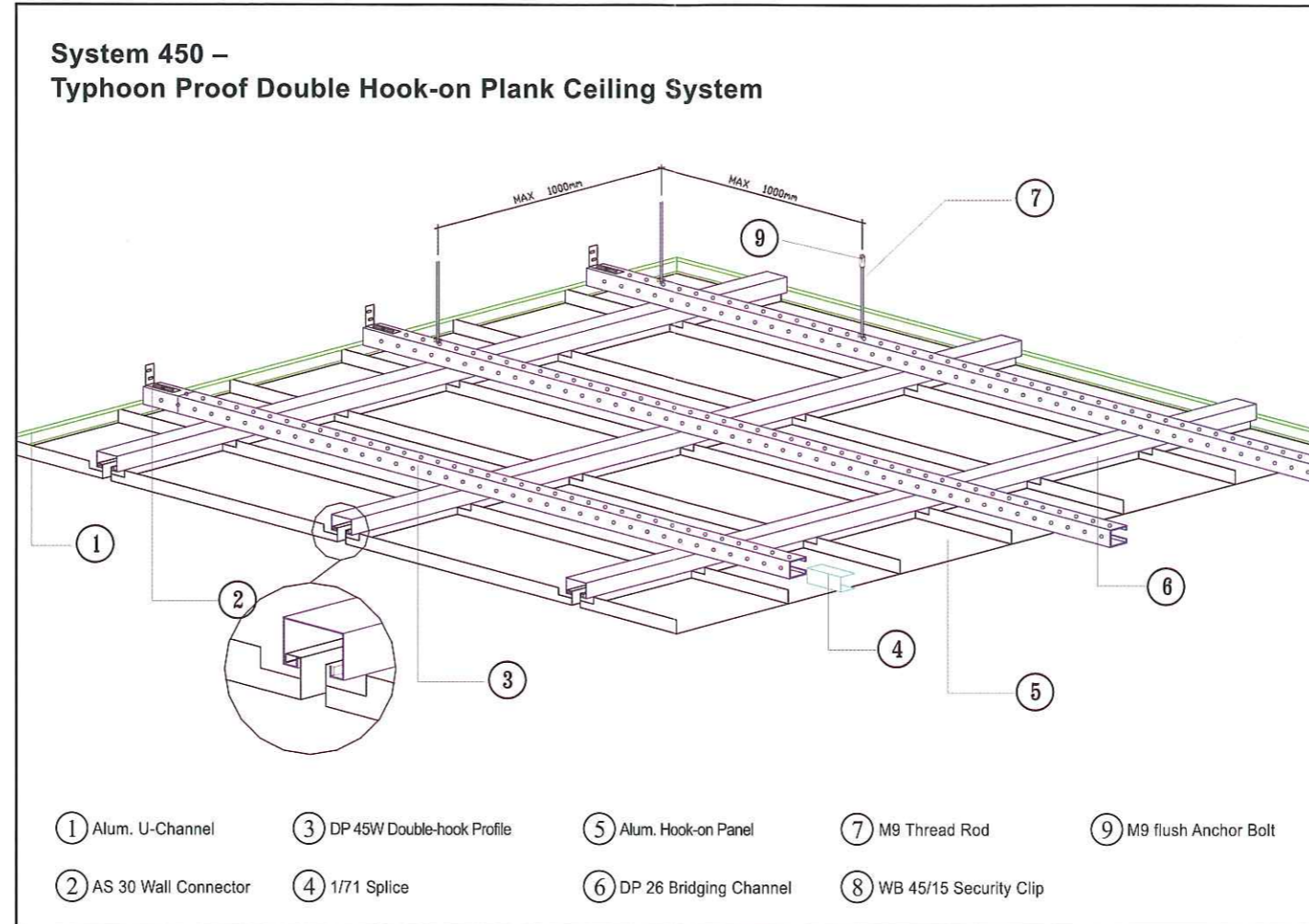


System 450 – Typhoon Proof Double Hook-on Plank Ceiling System

“Suckow & Fischer” Double Hook-on Typhoon Proof Ceiling System is the most distinctive and heavy-duty system for exterior applications. The system has aesthetically appearance, design flexibility and practicality for servicing. One of the remarkable advantages of the system is individual ceiling panel can be dismantled from the front surface for access and maintenance with no special tools required. In other words, the system does not require Access Panels and it provides 100% accessibility to the plenum. The system is sound, structurally rigid and reliable. The system does not require welding of metal sub-frame on site and it has successfully completed Wind Pressure Tests for severe storm conditions. The ceiling panels can be fabricated in various sizes, square in tile form or rectangular shape in plank form, depending on the ceiling layout design.

The Suspension System

The suspension system is one of “Suckow & Fischer” proprietary systems. The system consists of primary structural profile, ‘DP 26’ Bridging Channel, in 50x50x50mm U-shaped channel made of galvanized steel in 3.0mm thick with all surface pierced to provide accurate spacing for installation and even distribution of loading. The secondary structural profile, ‘DP 45W’ Double Hook-on profile, in 45x70x45mm is made of 2.0mm galvanized steel with pierced slots at the top which is fixed to ‘DP 26’ primary angle runner with bolts & nuts. The primary structure is suspended with threaded rods or galvanized steel hangers by means of bolts and nuts. The entire structural system does not require welding to replace the conventional metal sub-frame which is constructed by welding on site. It is far more efficient and accurate to fix the suspended structure with bolts and nuts. Most importantly, construction site safety is a primary concern to most governments nowadays; welding at site is prohibited in many countries. It is obviously much safer to construct metal works with bolts and nuts on site.



Double Hook-on Panel

The high quality double hook-on panel is fabricated with precision-engineered equipment to achieve flat and dimensionally stable surface. The ceiling panel is fabricated with double-bent hook on panel ends, with square edges, to hook onto the ‘DP 45W’ Double Hook-on Profile. The ceiling panel end shall have a 25mm continuous groove line to adjacent panel end to form a harmonious ceiling surface. Individual ceiling panel shall be securely locked with a Typhoon Proof Clip ‘WB 45/15’, to withstand wind pressure and suction. Ceiling panel can have a choice of 3mm black foam gasket at the panel up-stand to form a recessed shadow line and to create spacing for panel removal. Panels sizes are variable depending upon ceiling layout, please consult our “Suckow & Fischer” personnel for details. Recommended panel sizes are: 300x1500mm, 400x1200mm, 450x1200mm and 400x1500mm.

Wind Pressure Test Report

“Suckow & Fischer” System 450 Typhoon Proof Double Hook-on Plank Ceiling has gone through physical wind chamber tests done by recognized professional testing institution. The tests are complied with ASTM E 330, Procedure B. Test reports are available upon request.

Wall & Perimeter Treatments

Available in special designed wall trims, channel profiles or custom designed bulkheads and up-stands, all fabricated to incorporate with ceiling panels in matching colours for exterior applications.

Building Services

Hook-on ceiling panels can be designed to incorporate other building service facilities such as down lighting fixtures, sprinkler heads, smoke & fire detectors, security and broadcasting systems. Standard or custom designed Access Panels are available for easy access to plenum. Pre-opening holes fabricated at the factory are available optional.

Base Material & Finishes

Base material of the ceiling panels can be aluminium or electrolytically galvanized steel in standard RAL 9010 or other RAL colours. Finish coating of the panels can have the choices of using polyester powder coating, coil coated in advanced polymer system or polyvinylidene di-fluoride (PVDF). For more information, please refer to “Suckow & Fischer” Metal Ceiling Technical Brochure.



Access to Plenum

Double Hook-on ceiling panels are 100% demountable and accessible from the front surface. Individual ceiling panel can be dismantled and removed from the suspension grid by loosening the typhoon proof clips at the panel ends with Philip head screwdriver. The typhoon proof clips are recessed in the ‘DP 45W’ Double Hook-on profile along the panel ends. After removal of the typhoon proof clips, gently push the panel end upward and tilt the ceiling panel to remove from the Double Hook-on profile.

Advantages of System 450

- Designed to withstand wind load pressure
- Proven exterior ceiling system with test reports
- Fully de-mountable ceiling system from surface
- Site safety - sub-structure without welding onsite required
- Fast installation of sub-frame with bolts and nuts
- Flexible in rectangular or square shape

