



Underfloor Ducting Systems

Floor Distribution System

Introduction

WANGO's Underfloor Ducting System is the solution for indoor cable management in commercial, schools, institution, industrial or other similar mixed developments.

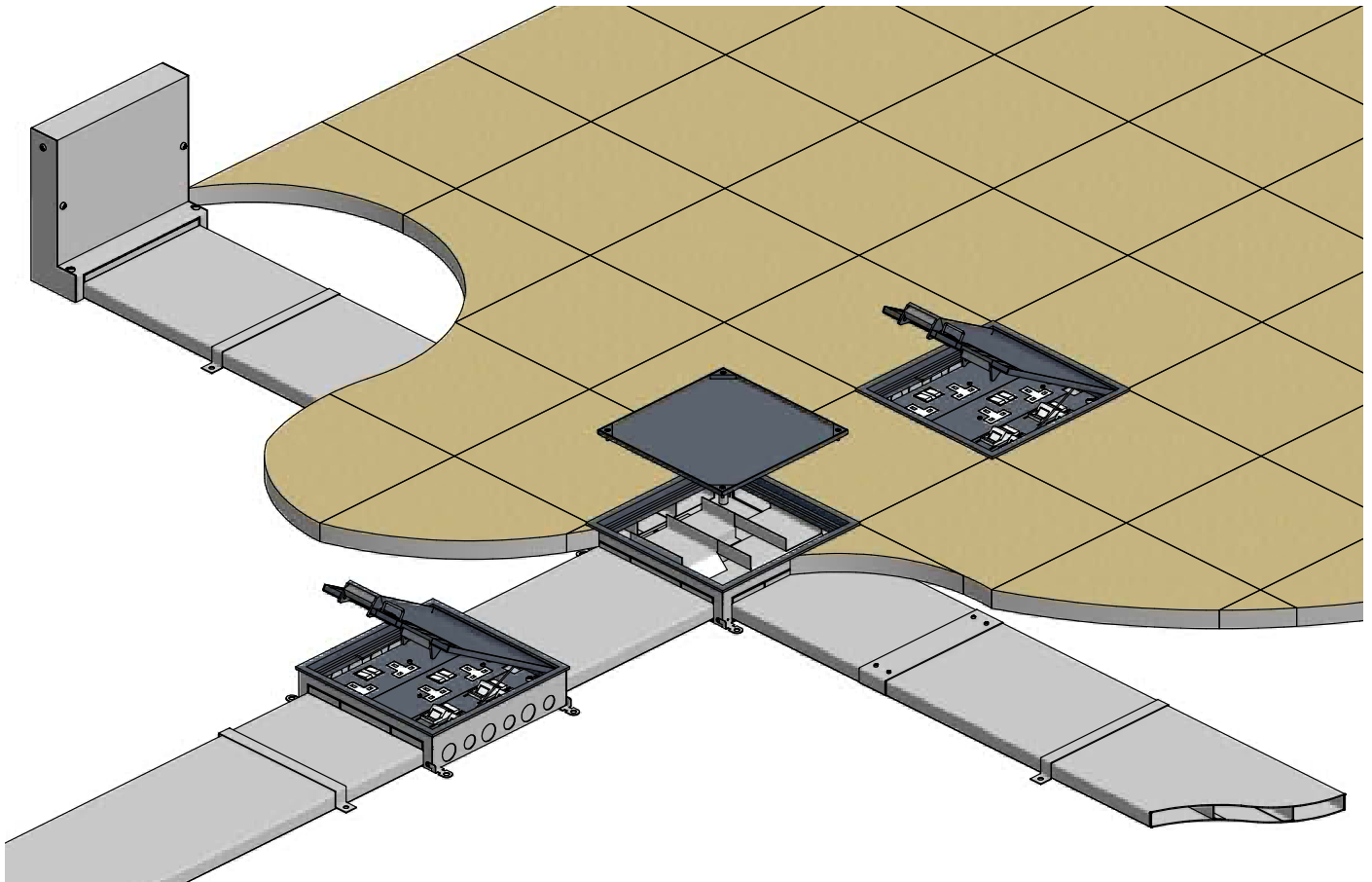
The system incorporates numerous design features to ensure a fast and simple installation for offices and other modern intelligent building designs that require flexibility in the management of the various services for management and usage.

WANGO's system consists of Service Outlet Boxes, Junction Boxes, Vertical Access Boxes, uPVC or Metal Ducting for encloses power, telephone, ancillary and also designed to support Cat 6 structured cabling requirements. Our floor boxes are IP2X rated in accordance with BS EN50085-1. Choice of 1, 2, 3 or 4 compartment boxes are available according to the layout plans, desired configuration and services requirements.

WANGO's Underfloor Ducting System is specifically designed to offer superior load bearing performance for this system upon the structural slab, before the screed is poured. The level of screed that can be accepted is between 65mm to 110mm. A minimum thickness of 25mm of screed is required to lay over the ducting. All of WANGO's Underfloor Ducting System junction and service boxes are constructed from very high quality GI sheet metal. Disposable lids are provided with all boxes for protection during screeding. The trap cover for the service boxes contain hinges and grommets to prevent damage of the cables at their exit locations.

Certifications

Floor Distribution System are tested to EN50085-2-2 and conforms with the various international standards.



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Planning and Layout

Two parameters need to be figured out before planning the system: if a two or three duct system is to be used, and the depth of the screed that will be used during the construction. These parameters will depend on what services are needed to be installed. The minimum depth of screed for WANCO's Underfloor Ducting System is 65mm.

Layout

To maintain the flexibility of the system, the ducting is usually laid out in a Grid, Fishbone or Comb pattern, and in one, two or three runs.

The GRID PATTERN is used when there is flexibility is needed by the occupants, especially when work areas need to be reorganised. We can easily increase the capacity by returning the individual ring mains through different runs of ducting.

The FISHBONE PATTERN is used in a medium sized area where less number of boxes are needed.

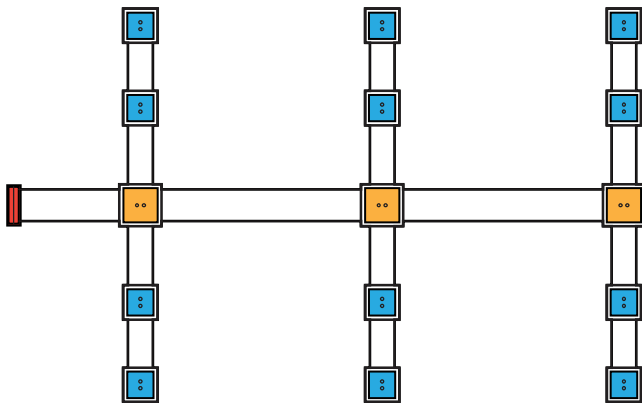
The COMB PATTERN requires less ducting, and is the most cost effective pattern.

Planning

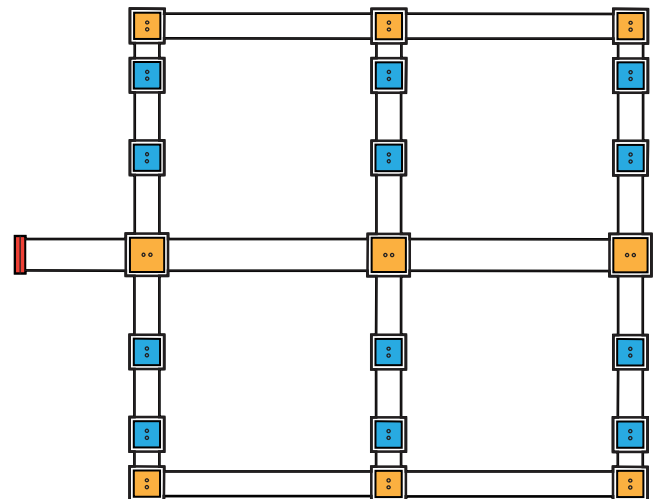
During the planning phase, it is important to take note of the following points:

- The ducting begins at the distribution board of the particular floor.
- Determine the services to be provided, capacity required for the ducting and the junction boxes to be laid.
- Ducting should be laid onto the structural slab, and it requires 25mm minimum of screed to cover the ducting.
- For long ducting runs, junction boxes should be used as draw-in boxes. It is recommended to keep the distance between two junction boxes to a maximum of 6m.

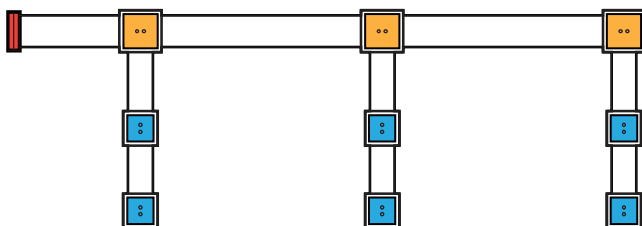
A typical FISHBONE PATTERN






A typical GRID PATTERN

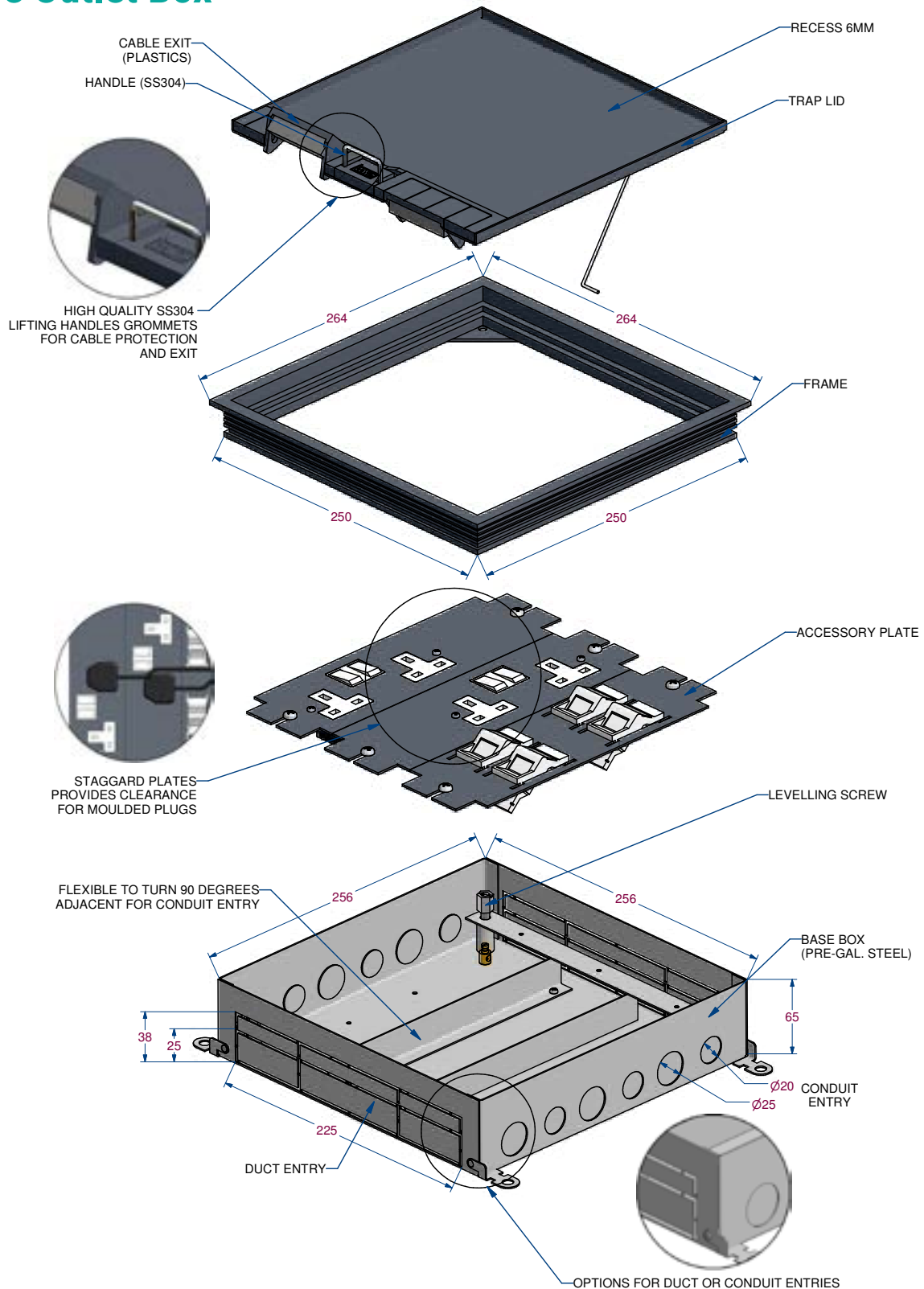


A typical COMB PATTERN



-  Vertical Access Box
-  Service Box
-  Junction Box

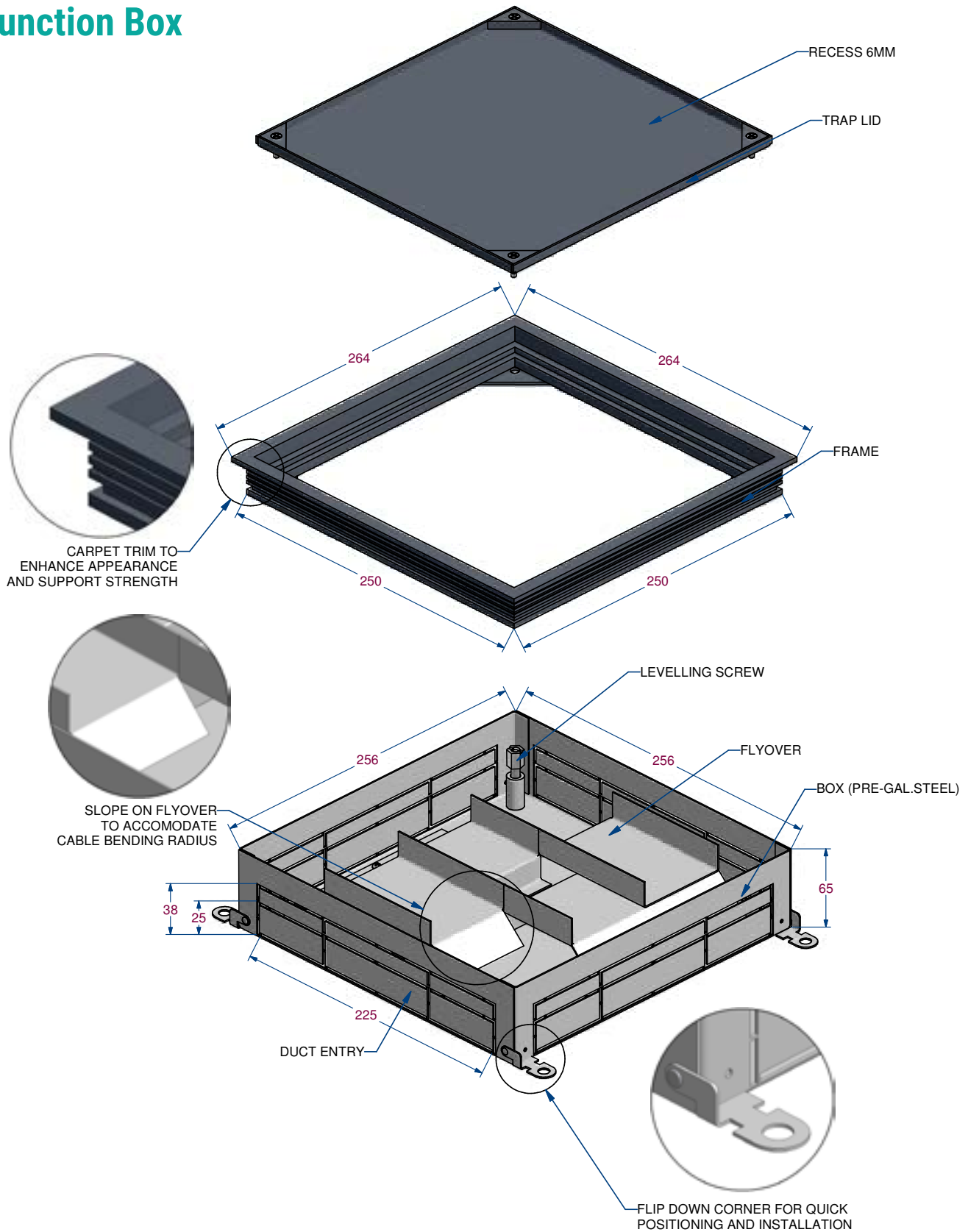
Service Outlet Box



Bespoke configuration of type, size, height, floor recess and finishes are available upon request

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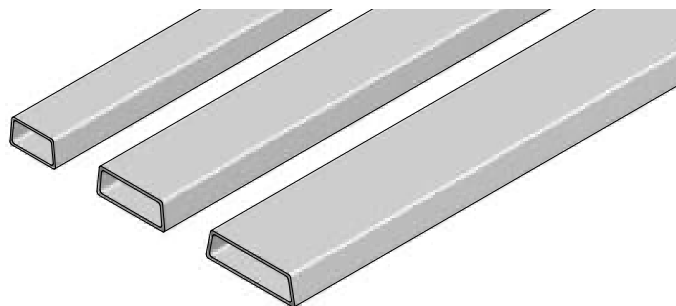
Junction Box



Bespoke configuration of type, size, height, floor recess and finishes are available upon request

uPVC Ducting and Accessories

- Material : Heavy gauge super high impact uPVC
- Standard length : 2.9 metres



uPVC Ducting

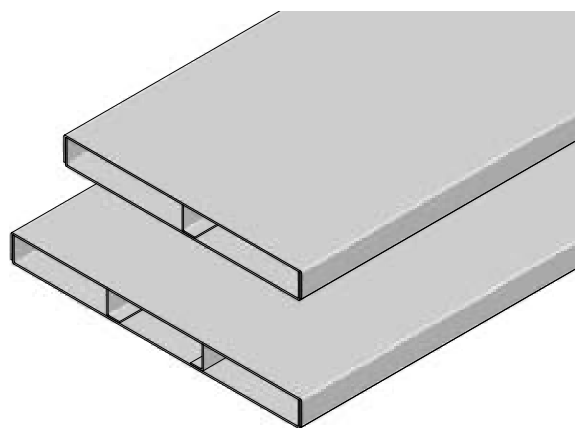
Part No.	DESCRIPTION
WUFPD2125	50 x 25 x 2.5mm
WUFPD3132	75 x 25 x 3.2mm
WUFPD4132	100 x 25 x 3.2mm

uPVC Jointing Sleeve

Part No.	DESCRIPTION
WUFPDJ2125	50 x 25 x 2.5mm
WUFPDJ3132	75 x 25 x 3.2mm
WUFPDJ4132	100 x 25 x 3.2mm

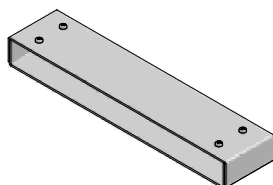
Metal Ducting and Accessories

- Material : Pre-galvanised Iron Steel to JIS G3302 SGCC
- Standard thickness of 1.2mm ~ 1.5mm or 1.6mm
- Standard lengths : 2.44 metres
- Single, twin or triple compartments
- Standard depths : 25mm, 32mm and 38mm
- Jointing Sleeves are supplied separately
- Bespoke lengths are available upon request
- Pre-punched knockouts on cover is available upon request

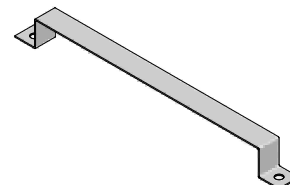


Width (mm)	100	225	225	275	275
Compartments	1	2	3	2	3
Height & Thickness					
25 (1.2mm)	WUFD1002512/1	WUFD2252512/2	WUFD2252512/3	WUFD2752512/2	WUFD2752512/3
25 (1.5mm)	WUFD1002515/1	WUFD2252515/2	WUFD2252515/3	WUFD2752515/2	WUFD2752515/3
38 (1.2mm)	WUFD1003812/1	WUFD2253812/2	WUFD2253812/3	WUFD2753812/2	WUFD2753812/3
38 (1.5mm)	WUFD1003815/1	WUFD2253815/2	WUFD2253815/3	WUFD2753815/2	WUFD2753815/3

Jointing Sleeve



Fixing Clip



Width	100	225	275
Height			
25mm	WUFDJ10025	WUFDJ22525	WUFDJ27525
38mm	WUFDJ10038	WUFDJ22538	WUFDJ27538

Width	100	225	275
Height			
25mm	WUFDJ10025	WUFDJ22525	WUFDJ27525
38mm	WUFDJ10038	WUFDJ22538	WUFDJ27538

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Junction Box

WANCO Underfloor Distribution System Junction Box provides access to cables at the intersection of ducting straight runs or changes of direction in the layout. The ducting forms a system of distribution to segregate services within the junction box.

The main components of the Junction Box are

- Adjustable corner pillar supports are made with very high quality materials for good load mechanical strength and resistance to corrosion
- Flyovers are constructed from galvanised steel with epoxy coating
- Base Box are made from Pre-Galvanized steel with very good corrosion resistance properties
- Frame & Trap Covers are epoxy coated to give the asthetic finish and protection against wear and tear.



Junction Box Suitable for uPvc or Metal Ductings of height 25, 32 & 38mm

Size & Depth	250 x 250 (60-80mm)	250 x 250 (80-95mm)	250 x 250 (95-110mm)	300 x 300 (60-80mm)	300 x 300 (80-95mm)	300 x 300 (95-110mm)
Compartments Available*	2 or 3	2 or 3	2 or 3	2 or 3	2 or 3	2 or 3
6mm Recess for Carpet	WUFJB250/*/R6	WUFJBX250/*/R6	WUFJBXT250/*/R6	WUFJB300/*/R6	WUFJBX300/*/R6	WUFJBXT300/*/R6
12mm Recess For Tile	WUFJB250/*/R12	WUFJBX250/*/R12	WUFJBXT250/*/R12	WUFJB300/*/R12	WUFJBX300/*/R12	WUFJBXT300/*/R12

Bespoke configuration of size, height, floor recess and other finishes are available upon request.

Service Outlet Box

WANCO's Underfloor Ducting System service outlet box, pillar supports, base plates and side blanks are all made from pre-galvanised steel, which offers good protection from rust after installation.

The main components of the Service Box are:

- Adjustable corner pillar supports are made with very high quality materials for good load mechanical strength and resistance to corrosion
- Base Box and compartment partitions are made from Pre-Galvanized steel with very good corrosion resistance properties
- Options for extra depth to accommodate larger volume of cabling or other services requirements.
- Frame & Trap Covers are epoxy coated to give the aesthetic finish and protection against wear and tear.
- Wide range of accessory plates to accommodate power, telephone, USB, data, HDMI etc options



Service Outlet Box suitable for uPvc or Metal Ductings of height 25, 32 & 38mm

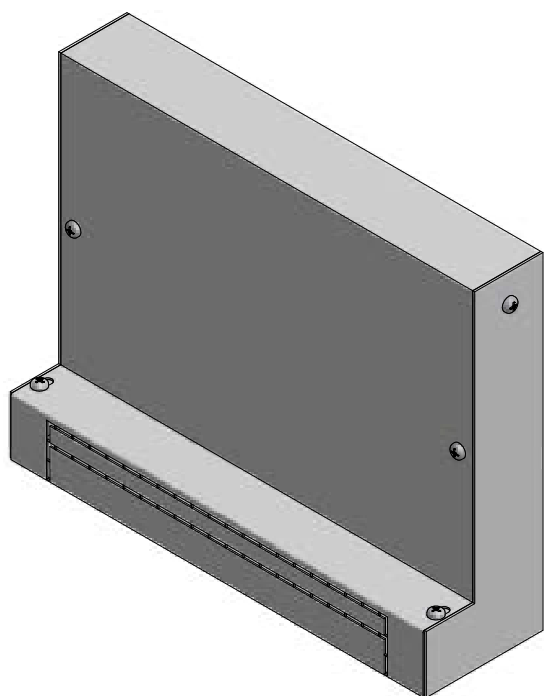
Size & Depth	125 x 125 (60-80mm)	125 x 125 (80-95mm)	180 x 180 (60-80mm)	180 x 180 (80-95mm)	250 x 250 (60-80mm)
Compartments Available*	1	1	1 or 2	1 or 2	2 or 3
6mm Recess for Carpet	WUFSB125/*R6	WUFSBX125/*R6	WUFSB180/*R6	WUFSBX180/*R6	WUFSB250/*R6
12mm Recess For Tile	WUFSB125/*R12	WUFSBX125/*R12	WUFSB180/*R12	WUFSBX180/*R12	WUFSB250/*R12

Size & Depth	250 x 250 (80-95mm)	250 x 250 (95-110mm)	300 x 300 (60-80mm)	300 x 300 (80-95mm)	300 x 300 (95-110mm)
Compartments Available*	2 or 3	2 or 3	2 or 3	2 or 3	2 or 3
6mm Recess for Carpet	WUFSBX250/*R6	WUFSBXT250/*R6	WUFSB300/*R6	WUFSBX300/*R6	WUFBXT300/*R6
12mm Recess For Tile	WUFSBX250/*R12	WUFSBXT250/*R12	WUFSB300/*R12	WUFSBX300/*R12	WUFBXT300/*R12

* Denotes number of compartments.

Bespoke configuration of size, height, floor recess and other finishes are available upon request.

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Vertical Access Boxes

WANCO's Underfloor Ducting System vertical access box enables easy access from floor ducts to wall ducts, for connections to distribution boards or other floors.

Vertical Access Box suitable for uPvc or Metal Ductings of height 25, 32 & 38mm

Part Number	Description
WUFVB125/1	125 x 200 x 50 x 1 Compartment
WUFVB250/2	250 x 200 x 50 x 2 Compartment
WUFVB250/3	250 x 200 x 50 x 3 Compartment
WUFVB300/3	300 x 200 x 50 x 3 Compartment

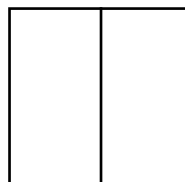
Accessory Plates

- Accessory plates are used for mounting of wiring devices, telephone, data or other ancillary outlets to WANCO Service Outlet Boxes
- Standard Plates are used for mainly 1, 2 or 3 compartment boxes size ranging from 150x150 to 300 x 300mm
- All accessory plates are supplied in epoxy coated Dark Grey finish
- Bespoke or customized configuration are also available upon request.

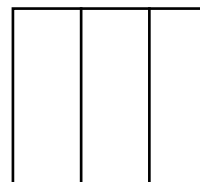
1 Compartment



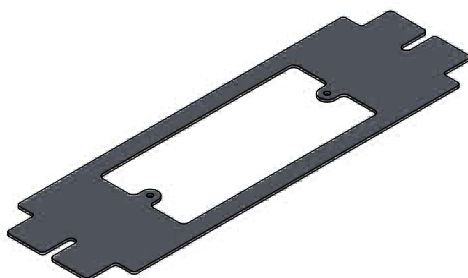
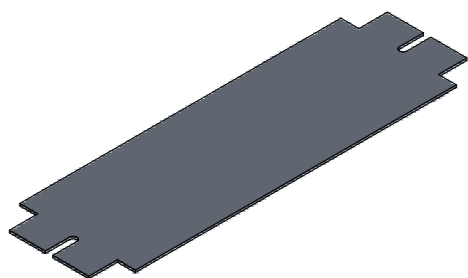
2 Compartments



3 Compartments



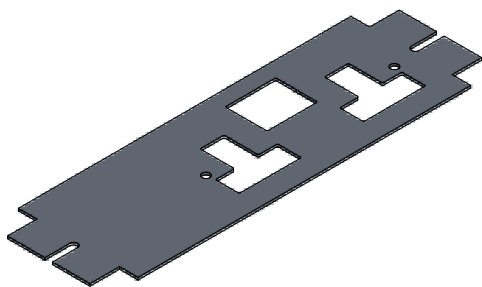
Blank Plates



Part Numbers	For Service Outlet Sizes	No of Compartments
WP125101	125 x 250	1
WP180101	180 x 180	1
WP250201	250 x 250	2
WP250301	250 x 250	3
WP300301	300 x 300	3

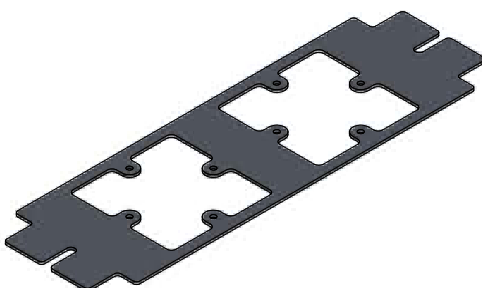
For 1 x 2 Gang BS SSO (Fixing Centres 120.6mm)

Part Numbers	For Service Outlet Sizes	No of Compartments
WP125102	125 x 250	1
WP250202	250 x 250	2
WP250302	250 x 250	3
WP300302	300 x 300	3



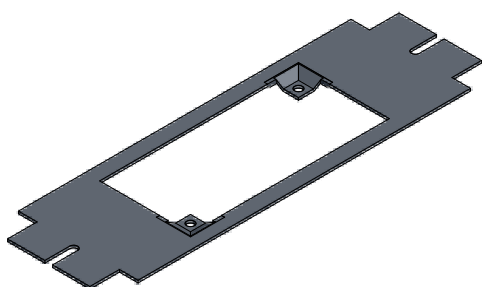
For 1 x 2 Gang 13A Panel Mount SSO

Part Numbers	For Service Outlet Sizes	No of Compartments
WP250203	250 x 250	2
WP250303	250 x 250	3
WP300303	300 x 300	3



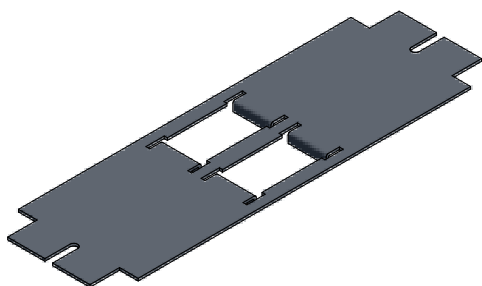
For 2 x 1 Gang BS SSO or TEL & DATA Faceplate (Fixing Centres 60.3mm)

Part Numbers	For Service Outlet Sizes	No of Compartments
WP250204	250 x 250	2
WP250304	250 x 250	3
WP300204	300 x 300	2
WP300304	300 x 300	3



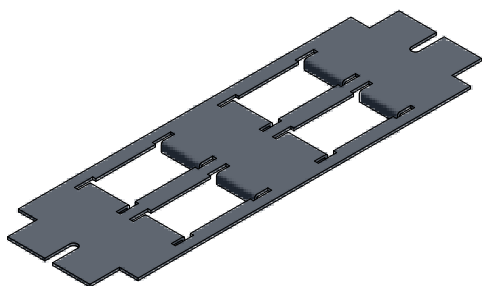
For 1 x 2 Gang 13A Mini Surface Mount SSO

Part Numbers	For Service Outlet Sizes	No of Compartments
WP250205	250 x 250	2
WP250305	250 x 250	3
WP300205	300 x 300	2
WP300305	300 x 300	3



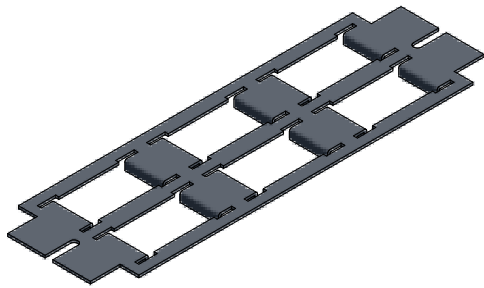
For 2 x RJ45 TEL & DATA Angled Module (45 x 25mm)

Part Numbers	For Service Outlet Sizes	No of Compartments
WP250206	250 x 250	2
WP250306	250 x 250	3
WP300306	300 x 300	3



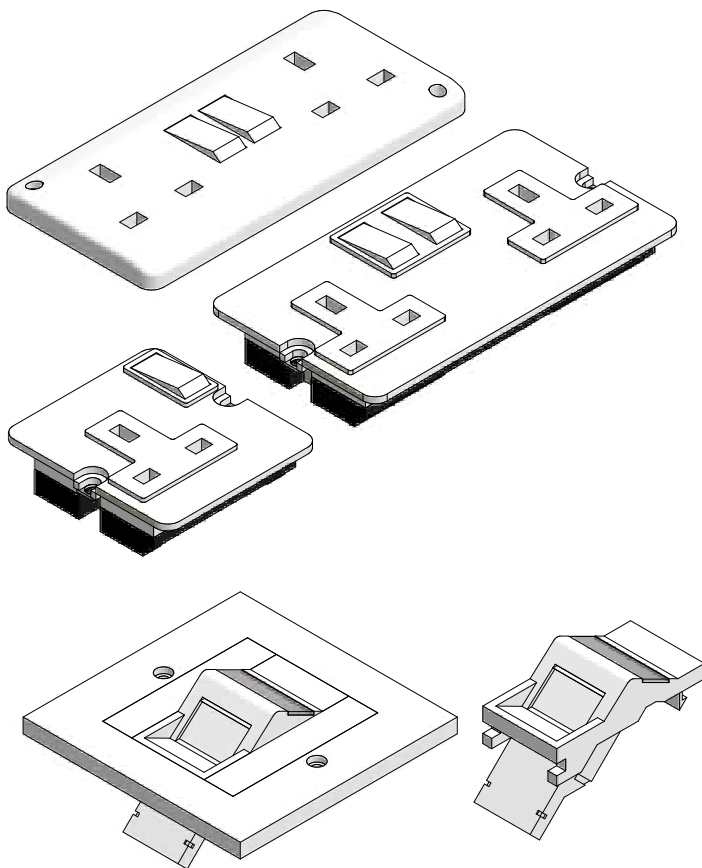
For 4 x RJ45 TEL & DATA Angled Module (45 x 25mm)

Part Numbers	For Service Outlet Sizes	No of Compartments
WP250207	250 x 250	2
WP250307	250 x 250	3
WP300307	300 x 300	3



For 6 x RJ45 TEL & DATA Angled Module (45 x 25mm)

Part Numbers	For Service Outlet Sizes	No of Compartments
WP250208	250 x 250	2
WP250308	300 x 300	3
WP300208	300 x 300	2
WP300308	300 x 300	3



Power

Part Numbers	Description
SSO-13A1WP02	13A Single Switch Socket, Panel Mounted
SSO-13A2WP03	13A Twin Switch Socket, Panel Mounted
SSO-52923	13A Twin Mini Switch Socket

Telephone or Data

Part Numbers	Description
CAT5E	Cat5e Module
CAT6	Cat6 Module
ADAPTOR45DEG	45 Deg Module Adaptor
1GFACEPLATE	1G Faceplate for 45deg Adaptor

HDMI

Part Numbers	Description
HDMI	HDMI Outlet
USB	USB Port
VGA	VGA Port

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