



IT Cabinet

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"We can - We do"

MESSAGE

I am proud to be a part of Wajhat Metal **Industries Company**

Wajhat Steel Door is strongly focused toward a basic business principle. "Accurately matching the detailed needs of the customer through utilization of the best available human and technical resources": this is our fundamental motto:

We try to attain the highest position in our market, to be at least equal to, and exceed, the very best in fitness for purpose in the field of Marbles, Granite, Glass, Architectural Aluminum and Metal doors in Saudi Arabia and throughout the entire Gulf Region. As a result, we will strive to give highest possible value to our Customers, to our Shareholder and to our Communities through working practices which are fully responsive to the complex requirement for sustainable manufacture and design to maximize environmental benefits in full current "Green Building" guidelines.

The company has strived to be amount the best and highly reputed in these industries, both within the Middle East, and beyond!

Therefore we seek to achieve the highest levels of integrity and honesty in all our interactions with business partners and associates, to ensure timely delivery of products whose

finish, appearance and performance are totally in accordance with our tradition for quality manufacture.

This is the starting point towards achieving of greater success for all parties concerned the Group, our staff, our suppliers and our customers at large. The company has successfully assembled a highly capable Team Managers, Administrative Staff, Supervisors and Factory Personnel to rival the best in the region.

Fahad A. A. Al Harbi

Chief Executive Officer

MESSAGE

We strive to build on our expanding record of product excellence

Wajhat Hollow Metal Doors factory is a division of Wajhat Industrial Investment Company which in turn is an investment of the renowned and highly reputed "Al Harbi Holding" Group of Industries, having strong and well-established interests in different segments of the Business Spectrum including Manufacturing, Trading, Contracting as well as real Estate and Investment.

We strive to build on our expanding record of product excellence and technological innovation in the provision of materials, and to provide high quality, reliable and durable product and service to our valued customers.

We believe in a long standing relationship with our vendors and our alignment to their goals and objectives allows us to meet our customer requirements satisfactorily. Hence; we hire and appoint the very best of human resources available in the required field of experience, both Local and Multi-National.

Our corporate philosophy is geared to strengthen the market leadership by capitalizing on opportunities through strategic alliances, acquisitions, augmented investments, with strong emphasis on safety, quality and customers satisfaction.

We are confident that we are on the right track. With our dedicated and hardworking team, we can overcome the challenges ahead to provide high quality service to our customers and yield better returns for our stakeholders.

Eng. Basil Safadi Managing Director

WAJHAT METAL INDUSTRIES



GENERAL

FIRE DOOR OPENINGS

A fire door is hinged door with fire resistance rating. Fire doors are used to reduce the spread of fire or smoke

between seprate parts of building. As such, they play a

crucial role in a building's passive fire protection system.

Fire rated doors and frames play a vital role in keeping

people safe and minimizing property damage during a fire.

Hollow metal doors are excellent at limiting the danger and



lot happens at our doors. Welcomes, handshakes, Smile, Friendship, Management Decisions… we have seen it all. We have been an intimate part of your everyday, in your very own personal space; all the while keeping you secure, yet staying almost invisible.

We are Wahjat metal door Saudi finest customized steel door and frame manufacturer. Our strength in production, quality innovation, technological competence and distribution have allowed us to penetrate The entire kingdom as well as take us beyond kingdom's boundaries. You will find us numerous installation across middle east.

Wajhat Metal Industries is based in Riyadh -Kingdom of Saudi Arabia, WMI is specialized in manufacturing of high quality hollow metal steel doors, steel frames, IT cabinet and cable tray. The rising demand of industrial products in Saudi market due to the huge construction boom is being met with the ambitions of Wajhat Industrial Investment Co. to establish WMI which is targeted to be one of the leading companies in the metal industry, using the latest technology of machineries imported from the biggest and most reputable metal sheet fabrication equipment manufacturers/suppliers.

WMI is a part of Wajhat Industrial Investment Co. which is an associate of Al Harbi Holding Co. a conglomeration of large companies specialized in various industry fields such as; Granite and Marbles (SMG), Minning, Construction, MEP Construct, Educational programs, Real Estate, Information Technology, Aluminum and Glass, all are consolidated under one umbrella.

The whole experiences of the group members were consecrated to establish a strong leading factory with appropriate work environment. Establishing the plants was based on accurate studies of all industries requirements; hiring qualified & experienced staff, constructing a comfortable plant in around 10500 m² owned by the company, importing the ever advanced machineries with the latest technology.

Our objective is to achieve the highest reputation as a leading company in the metal industries by providing a high quality of the products, accuracy and punctuality of the commitments.

WMI has created strict strategies to meet contractors, consultants and owners satisfaction; by focusing on product quality and after sales service as well as concentration on customer requirements in professional means.

Our main goal is to gain customers satisfaction and to obtain business relations as business partners.

FIRE DOOR OPENINGS

Opening	Wall Rating	Door and Frame Rating	Description and Use
	4 Hour	3 Hour (180 minutes)	These openings are in walls that separate buildings or divide a single building into designated fire areas.
	2 Hour	1-½ Hour (90 minute)	Openings of this type are used in enclosures of vertical communication or egress through buildings. Examples of these types of openings include stairwells and eleva tor shafts.
	1 Hour	1 Hour (60 minute)	These door and frame assemblies divide occupancies in a building.
	1 Hour	³¼ Hour (45 minute)	For use where there are openings in corridors or room partitions.
	2 Hour	1-½ Hour (90 minute)	This opening is in a wall where there is the potential for severe fire exposure from the exterior of the building.
	1 Hour	³¼ Hour (45 minute)	This opening is in an exterior wall that has the potential to be exposed to moderate to light fire from the exterior of the building.
•••	1 Hour	☐ Hour (20 minute)	These openings are in corridors where smoke and draft control is required. The minimum wall rating is ½ hour.











damage of fires.





Polystyrene Core

Polyurethane Core

Rock Wool



Wajhat Metal Industries aim is to comply with projects specifications and to **provide a high quality of the products**, considering the ethics of the company policy which is the core of our strategy.

Working closely with contractors to build long term business relationships based on strict quality and commitments. To assure the proper process of the projects, we created strategies for each department to organize the process in order to get good results and outputs as follow:

Sales and Projects Dept.:

Providing full support and cooperation to the customers and focusing on exact required details before starting fabrication to guide the project to the handing-over stage in perfect time.

Engineering Dept.:

Responsibility of filtration and summarization of projects specifications and technical details and translate into fabrication drawings which is the main guidance and reference during fabrication.

Quality Assurance & Quality Control:

To control and monitor the quality of the product in accordance with the actual projects specifications & requirements with references to international codes and standards i.e. SDI, UL, ASTM, ANSI, BSI and DIN.

Production:

Processing fabrication of the product as per quality standards with a strict production plan to

achieve accurate delivery time to meet customer satisfaction.

Dispatch:

Receiving finished goods, processing packing in professional and proper means, using standard packing and protection material and processing material dispatch as per commitments.

MANAGMENT

POSITION	NAME
Chief Executive Officer	Mr. Fahad A. A. Al Harbi
Managing Director	Eng. Basil Safadi
Sales & Marketing Manager	Eng. Syed Munir Ahmed
Factory Manager	Eng. Ramzi Abu Irshaid
Engineering Manager	Eng. Asif Shahzad
Finance manager	Mr. Maisam Muhammad

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General

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WAJHAT METAL INDUSTRIES



STEEL DOORS AND FRAMES

Metal Steel Frames:

WMI is a hollow metal door and frame manufacturer specializing in the rapid shipment of custom products. All of our doors and frames are manufactured to our clients' specifications. While our specialty is manufacturing custom frames, we also make stock KD drywall and masonry frames to your specifications.

Our standard frame product is 16-gauge galvannealed steel; we offer other material options including G90 galvanized and stainless steel. Manufactured from cold rolled steel sheets to ASTM A366 or from galvanized steel to ASTM A 653 Available in nominal 1.2mm (18ga.), 1.5mm (16ga.), 2.0mm (14ga.), and 2.5mm (12ga.).

Hardware reinforcing in accordance to ANSI, SDI, NFPA standards requirements. Tested according to NFPA 252 and UL10(b) and labeled up to 3 hours Level "A" grade in accordance with ANSI A 250.4 test procedures. Available in various type profiles.

- Masonry Wall type
- Slip-on Dry Wall type
- Adjustable type
- Groove type
- Double Egress type
- Double Acting Type
- Transom/Mullion type

Hollow Metal Steel Doors:

Manufactured from cold rolled or galvanized steel and from stainless steel of either 18, 16 and 14 gauges. We are also able to manufacture Lead Lined Doors commonly used at Radiology and X-rays Rooms of Hospitals and Clinics. The criteria to prevent penetration of X-Ray radiation through the door up to certain limits depend on the intensity and density of generated radiation from machines or equipment available in the room or laboratory we supply Lead Lined Doors according to specific customers requirements of the generated radiation intensity and density and the specified test standards.

Specifications:

45mm (1 ¾") thick full flush construction. Manufactured from cold rolled steel sheets ASTM A653 or from galvanized steel ASTM A653 G60 & 90.

Available in nominal 1.0mm (20ga.), 1.2mm (18ga.) and 1.5mm (16ga.).

Core:

A foamed-in-place polyurethane core exceeding 35 Kg./Cu.Mt. (2.18 pcf) compressed density, entirely filling the inside of the door.

B.Pre-foamed polystyrene slab of 18 Kg./Cu.Mt. (1.12 pcf) density, filling the inside of the door Vertical edges are interlocked, hairline seamed (optional). 1.5mm (16 ga.) deep end channels at top and bottom of door for lasting integrity.

Tested according to NFPA 252 and UL10(b) and labelled up to 3 hours Level "A" grade in accordance with ANSI A 250.4 test procedures. Available with a wide range of glass and louver preparations.





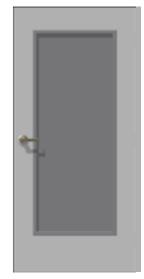












VISION PANELS AND LOUVERS:

There is a wide range of doors and windows with louvers. Please refer to our Windows and Louvers section for some examples. Different configurations and designs can be incorporated to match customer requirements, but for Fire Doors, please refer to the NFPA Fire Door Classification for maximum glass and louver sizes. All glazing frames and cut-outs are prepared and supplied by the door manufacturer. Glass is excluded from our scope unless noted otherwise.

Notes:

Standard clear (non-fire rated) or Georgion-wired glass (fire rated) and standard louvers are shown in the chart. The above table is a general guide to what is allowable within the fire ratings.

Exception may be made with suitable assessment certificates where special fire-rated

glass or fire louvers are incorporated, provided that they are acceptable to the local authority having jurisdiction.

Please refer to the "Notes on Glass and Louvers" section and NFPA Fire Door Classifications for additional guidance on glass and louver selections.

STANDARD DOOR, WINDOW AND LOUVER OPTIONS AS PER WMI, UL CERTIFICATION:

FIRE RATING (IN MINUTES)

OPTION TYPE	180	120	90	45	NONE
Flush Door	0	0	0	0	0
Vision Panel	Χ	Χ	0 (upto 100² inch / 645 sq. cm)	0 (upto 1296² inch / 8361 sq. cm)	0
Narrow Light	Χ	Χ	0	0	0
Half Glass	Χ	Х	X	0 (upto 1296² inch / 8361 sq. cm)	0
Double Half Glass	Χ	Χ	Χ	Χ	0
Full Glass	Х	Х	Х	Х	0
Vision Panel & Half Louver	Х	Х	Х	Х	0
Narrow Light & Half	Х	Х	Х	Х	0
Louver (Fusible Link) (24" x 24") Max	Χ	0	0	0	0
Half Louver	Х	Х	Х	Х	0
Double Half Louver	Х	Χ	Х	Х	0
Full Louver	Χ	Х	Χ	Χ	0

Lengends;

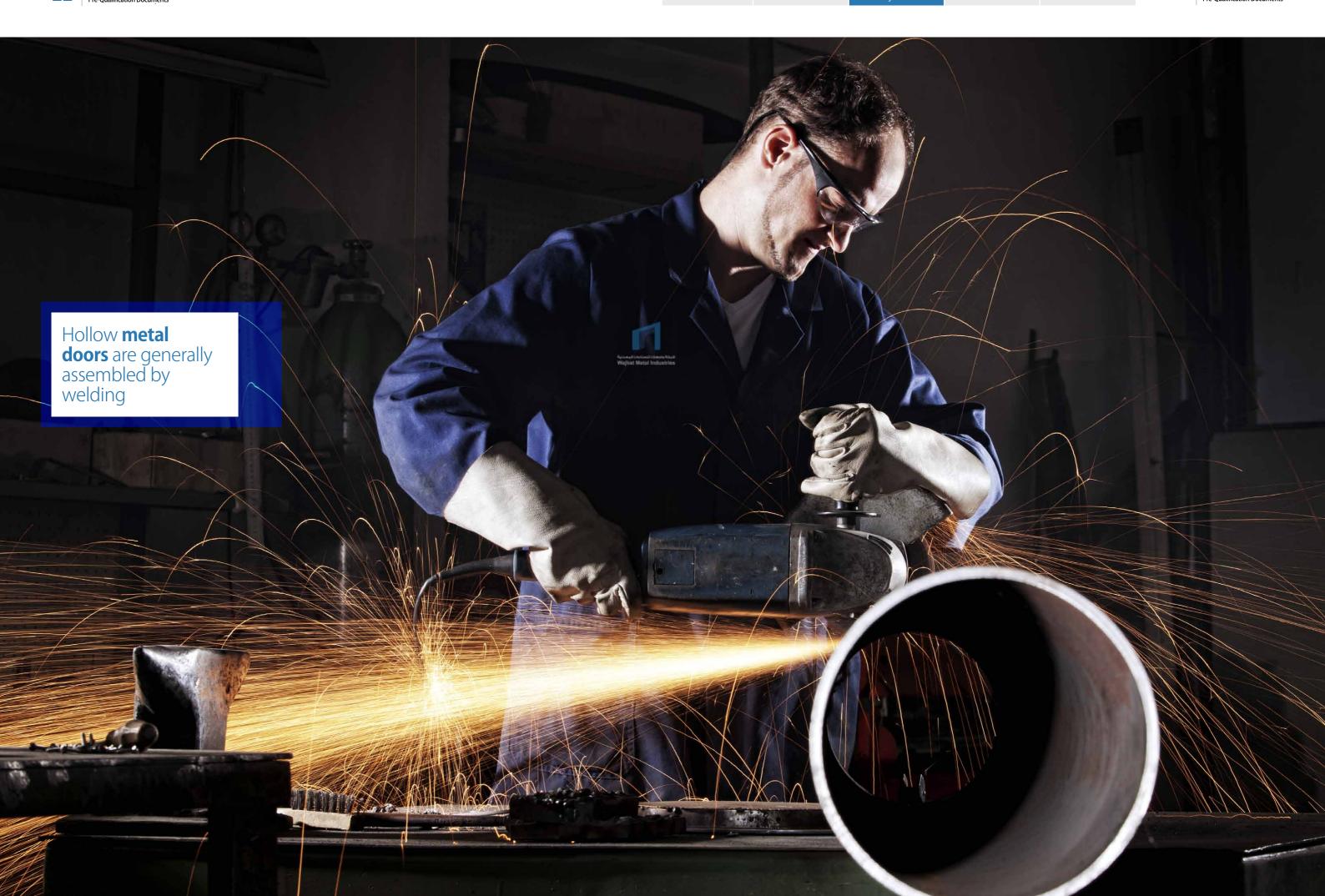
- 0 Applicable
- x Not Applicable

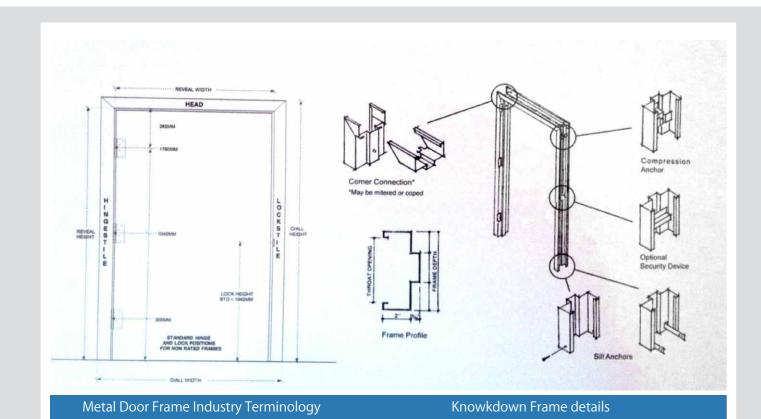
NFPA FIRE DOOR CLASSIFICATIONS:

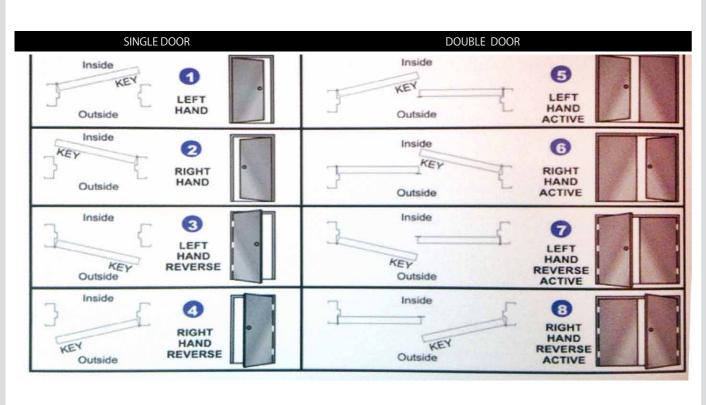
CLASSIFICAITON	USE IN BUILDINGS	ALLOWABLE EXPOSED GLASS AREA IN EACH DOOR LEAF
A 3 Hour Rating	Fire Wall Opening	No Glass Permitted
B 1-1/2 Hour Rating	Openings in Vertical Shafts	Maximum 100 square inches (645 sq.cm.) per opening
		Maximum width 10" (25cm) Maximum width 33" (84cm)
3/4 Hour Rating	Corridors Room Partitions Exterior Wall Openings (servere exposure)	Maximum 1296 square inches (8361 sq.cm.) per opening (No dimension to exceed 54" or 137cm)
D 1-1/4 Hour Rating	External Wall Openings (servere exposure)	No Glass Allowed
	(servere exposure)	

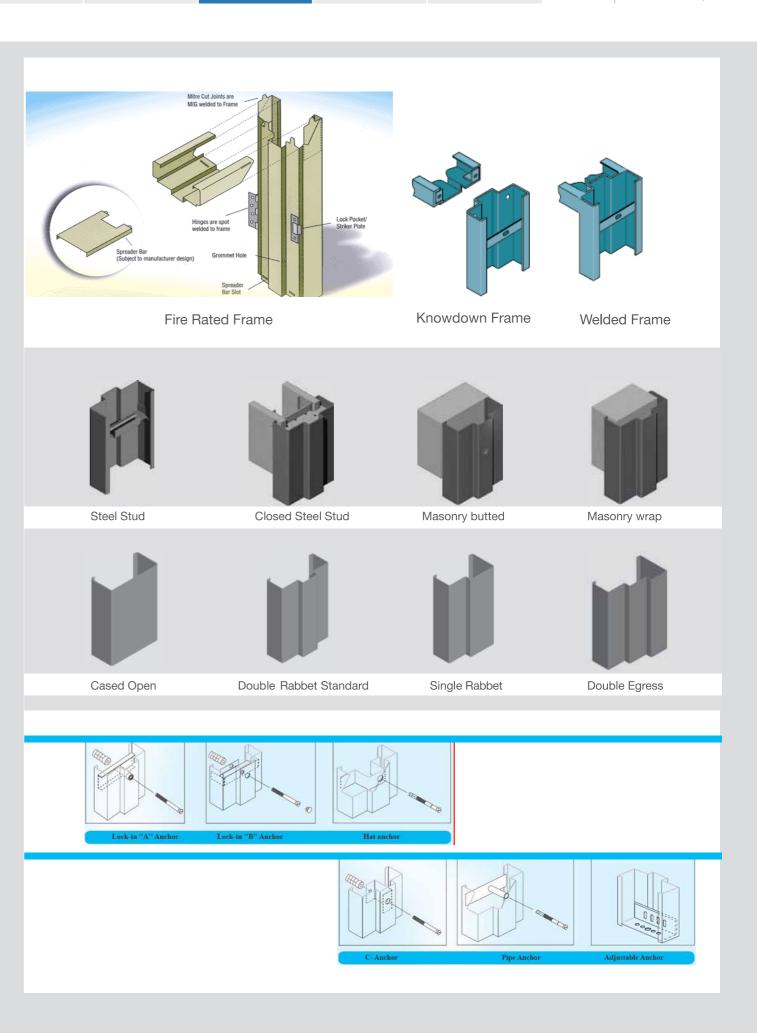
Glass must be suitably fire rated for the purpose (either wired or special clear fire glass).

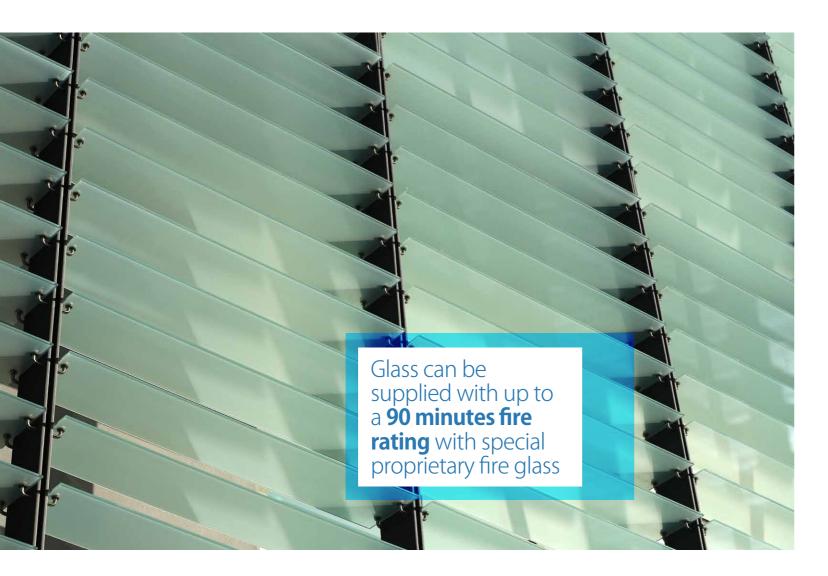












HARDWARE:

We have a wide range of high performance architectural quality hardware from well known supplier for our range of standard hardware for our doorsets.

Quotations can be provided on request.

CUSTOMER-OWNED HARDWARE:

Steel Doorsets can be fitted with most branded hardware products, provided that fixings and locations are compatible with steel doorsets.

Please note that some hardware products may be subject to extended lead times from the manufactures and therefore out of our control.

Where "preparations only" for customerowned supplied hardware is required, samples MUST be delivered to our factory before manufacturing of the doors commences to ensure that the internal support plates and cut-outs etc. are correct to the samples provided.

INSTALLATION INSTRUCTIONS:

- 1. Check that the opening is suitable to accept the door frame.
- 2. Remove packaging from the door leaf and/ or frame and check for transit damage.
- 3. All three (3) sided door frames (welded frames) are fitted with a travel spacer bar at the base. This should be removed prior to installation.
- 4. Offer the frame into the structural opening.

- 5. Plumb frame and wedge into position (equal gap to each side) ensuring the head member is levelled.
- 6. Drill fixing hole for top and bottom fixing position in each vertical member.
- 7. Insert fixing screws and tighten until frame is held in position, recheck alignment and adjust as necessary using shims or spacers between frame and brickwork and then fully tighten fixings. Do not over-tighten the screws as this may distort the frame.
- 8. Hang door and ensure it is hanging plunb. Gaps are nominally 2mm at hinge side, 3mm at lock side, and 3mm at the head.
- 9. Drill-through remaining holes in the frame and insert anchor bolts (anchor bolts not supplied).
- 10. Fix hardware as required. Doors will be prepared for mortised items such as locks but surface mounted items including door closer and panic devices will require site drilling and securing with self-tapping screws.
- 11. Apply mastic seal joints between structural opening and the frame (mastic sealant not supplied). NOTE :Intumescent mastic should be use on fire-rated doorsets.
- 12. Plastic filler plugs are proved to fit fixing holes if concealed fixing is used, otherwise screw heads are visible.
- 13. "Touch-up" any minor scratches or damage. Check all hardware to ensure easy and efficient operation.

NOTES ON GLASS AND LOUVERS:

GLASS:

Glass can be supplied with up to a 90 minutes fire rating with special proprietary fire glass. However, the standard option is Georgion-Wired glass, 14/ inch (6mm) thick.

For 90 minutes fire rating, the maximum size is allowed is 100 square inches maximum height of 33 inches (83.8 cm)

Doors with 45 minutes fire rating have a maximum glass area of 1296 square inches (8361 sq. cm.).

Please refer to the STANDARD WINDOW AND LOUVER OPTIONS section for standard sizes.

Non-standard designs are also available and our Projects Department is always pleased to assist with development details and designs prepared to customer requirements using the latest CAD technology and solid work design software.

LOUVERS:

Louvers installed in Fire Rated Doors must not be larger than 24" * 24" and must be of fusible link type.

Louvers are not permitted with doors having glass lights or fire exit devices.

For Non fire Rated Doors , both standard and non standard louver configurations can be accommodated

In certain circumstances, special assessment certificates are acceptable for special configurations by the local authorities having jurisdiction.

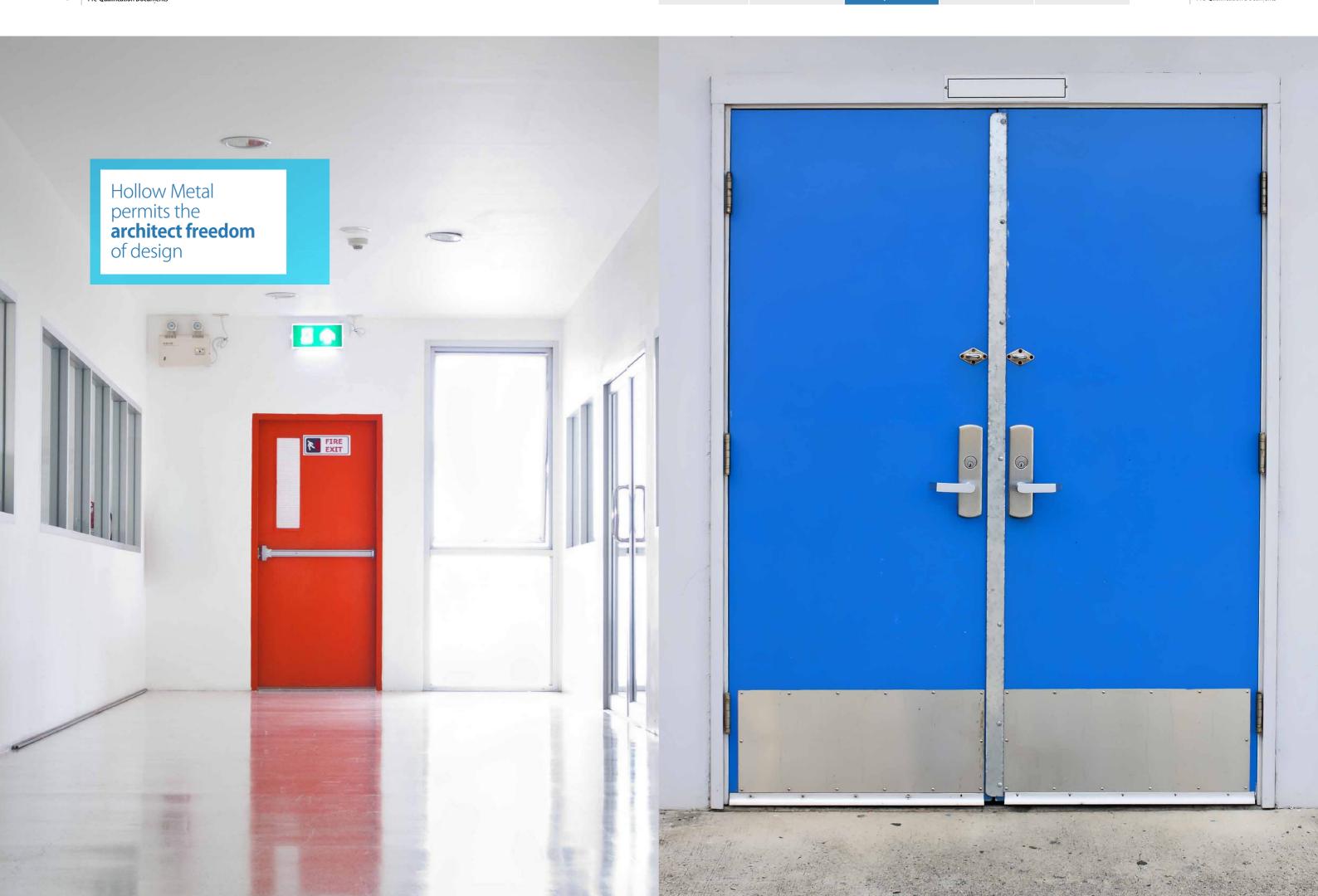




General

Product Summery

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Wajhat Metal Industries









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e-mail: door@anemostat.com • website: www.anemostat.com

FLDL-UL

FUSIBLE LINK LOUVER

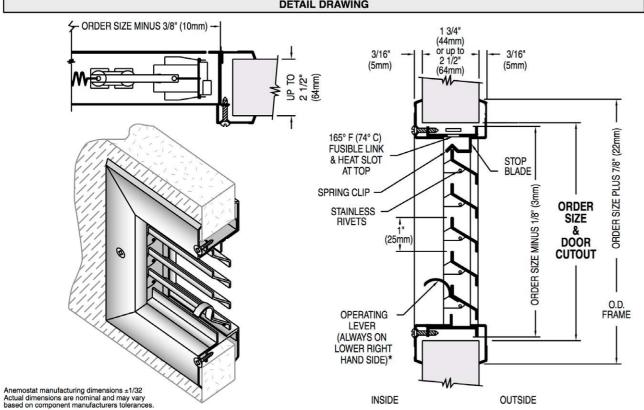


RATINGS

UNDERWRITERS' LABORATORIES FILE #R77776

B.S.-476.22 British Standard

DETAIL DRAWING



STANDARD PRODUCT FEATURES

- MATERIAL: 18 GA. Cold Rolled Steel Frame and Louver Blades, 16 GA. inner support members.
- · FINISH: Grey Primer, Beige or Bronze Baked Enamel.
- ' INSTALLATION: Self attaching using #8 x 1" phillips head screws that fasten the auxiliary frame to the louver core, thru the cut out in the door. The corridor side of the frame is free of fasteners for added security.
- * DOOR THICKNESS: 1 3/4" Door is Standard. Also available up to 2 1/2" Door (to maintain fire rating).
- · CLOSING ASSEMBLY: Stainless steel operating springs assure proper action with the closing mechanism.
- AESTHETICS: Tight mitered corners and countersunk mounting holes make for a clean appearance.
- · USES: In fire rated door applications.
- FREE AIR FLOW: 40% Free Area.
- NOTE: For Exterior use, High Humidity or Salt Air application, product must be Galvanized or Stainless Steel.

OPTIONAL FEATURES

- MATERIAL: #304 or #316 Stainless Steel, #4 Finish (Satin), Galvanized (Coil or Electro Plated). Not available in Hot Dipped or Aluminum.
- FINISH: Custom Baked Enamel Colors (as per sample chip supplied by customer).
- FASTENERS: Special security screw fasteners, See page 14, this section.
- SPECIALS: Fractional sizes not available.
- SCREENS: 18-14 mesh insert screens, framed or attached. (Galvanized, Aluminum, Charcoal Aluminum, Stainless Steel). For detail drawings see pages 12 and 13, this section.
- When framed screen is specified, finger pull is on the opposite side.

20/45/60/90 MINUTE: Approved listing (max width 24", max height 24") (min width 10", min height 6").

BS 476.22 Steel Doors - 2 hours. Tested to 610mm x 610mm

IMPORTANT: Interpretation of building and fire codes may vary. Consult with the local authority having jurisdiction in your area, to determine appropriate standards.

301	Name & Location	Submitted by
524A100B		

For Most Current Info, Consult Factory or check our website, www.anemostat.com

JANUARY 2010 LOUVERS PAGE 3 Product Summery

Waihat Metal Industries Pre-Oualification Documents

CERTIFICATE OF COMPLIANCE

Certificate Number 20140716-R27446

R27446 Report Reference 2014-July-16 Issue Date

Issued to: Wajhat Metal Industries Co.

PO BOX 25531

RIYADH 11476 SAUDI ARABIA

This is to certify that representative samples of Fire Door and Fire Window Frames

Have been investigated by UL in accordance with the Standard(s)

indicated on this Certificate.

UL 10B - STANDARD FOR FIRE TESTS OF DOOR Standard(s) for Safety:

ASSEMBLIES

UL 10C - STANDARD FOR POSITIVE PRESSURE FIRE TESTS

OF DOOR ASSEMBLIES

UL 9 - STANDARD FOR FIRE TESTS OF WINDOW

ASSEMBLIES

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for

additional information

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes the following elements: the symbol UL in a circle: (9) with the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

Maximum frames are 2438mm wide by 3962mm height and 336mm depth with transoms

Maximum frames are 2438mm wide by 3048mm height and 336mm depth

Knockdown frames are 2438mm wide by 2438mm height and 336mm depth without transoms

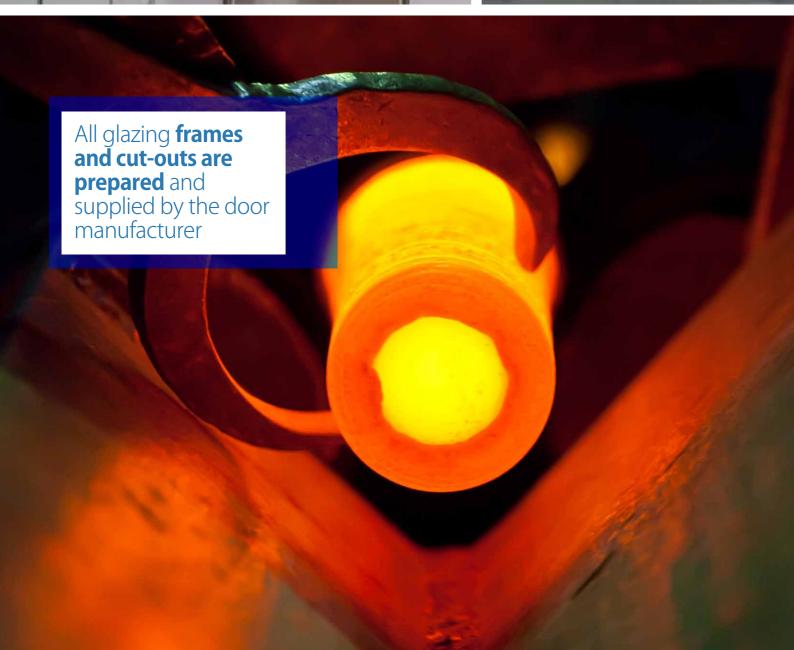
Any information and documentation involving UL Mark services are provided on bidnell of ULLLC (ULL) or any outhorized ill consec of UL. For questions, please port and a local ULL optioner Service Representative of present lating to provide half us.



Page 1 of 1







CERTIFICATE OF COMPLIANCE

Certificate Number 20140716-R27447

Report Reference R27447 Issue Date 2014-July-16

Issued to: Wajhat Metal Industries Co.

PO BOX 25531

RIYADH 11476 SAUDI ARABIA

This is to certify that representative samples of

Additional Information:

Swinging-type Fire Doors

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

ANSI/UL 10B, "Fire Tests of Door Assemblies", Standard(s) for Safety:

NFPA 252 - Standard for Fire Tests of Door Assemblies

See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes the following elements: the symbol UL in a circle: with the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

Single 1016mm wide by 2438mm height rated 1-1/2 hours
Pair 1928mm wide by 2438mm height with 1-1/2 hours
Steel composite doors with 1.2mm and 1.5mm thick steel faces over honeycomb core.

Single 1219mm wide by 3048mm height rated 1-1/2 and 3 hours Pair 2438mm wide by 3048mm height with 1-1/2 and 3 hours Hollow metal doors with rockwool infill and vertical stiffeners with 1.2mm and 1.5mm thick steel faces.

Stainless steel doors 1-1/2 and 3 hours Single 1016mm wide by 2438mm height Hollow metal doors with rockwool infill and vertical stiffeners with 1.2mm and 1.5mm thick steel faces.

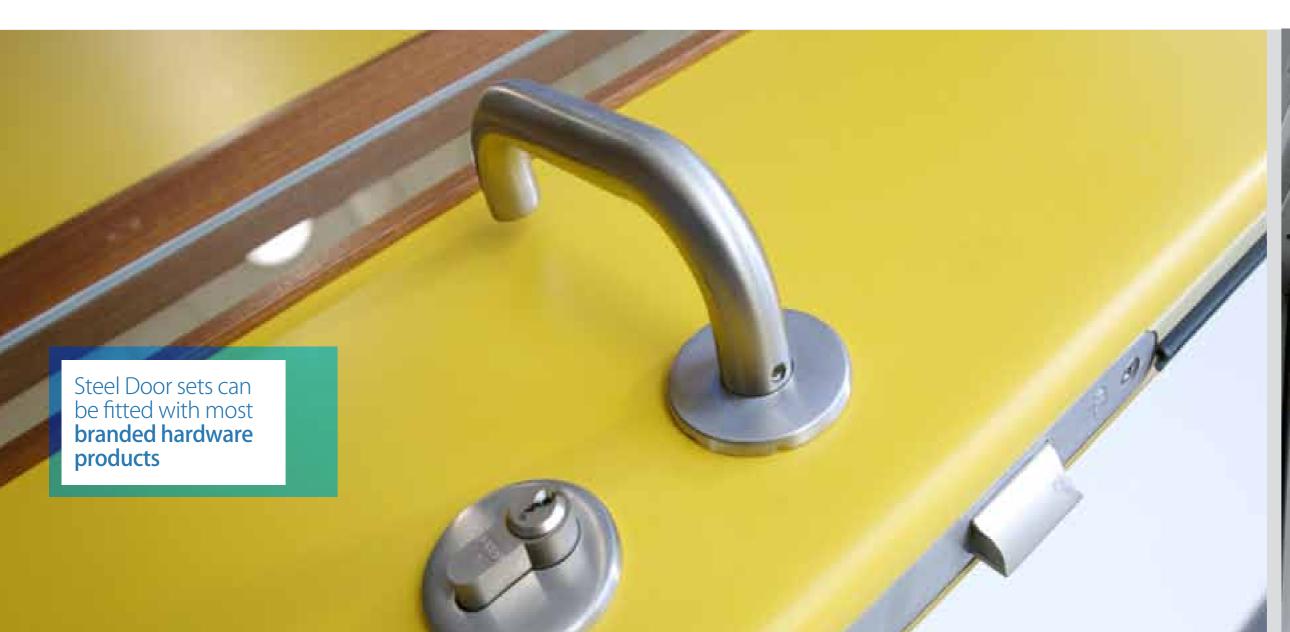


Gonoral

Product Summery

S

e Tray















Methods of Fabrication

A. GENERAL

Hollow metal permits the architect freedom of design. The common methods of cutting, forming, and assembling for hollow metal doors are therefore of concern to the architect, these operations include shearing, punching, forming and welding.

B. SHEARING

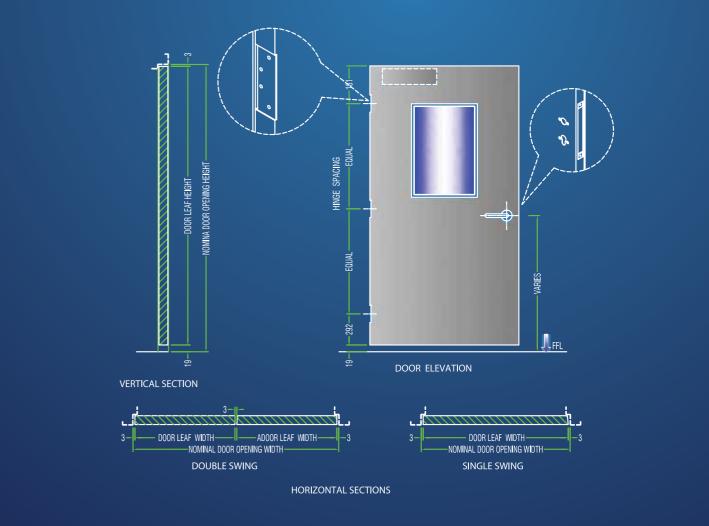
Most raw material for hollow metal doors are purchased in the form of flat sheets which, prior to forming, must be cut to exact size. Shearing is the simplest method of obtaining straight cuts. It is typically done on a machine called a shear, which consists of a table-like "bed" on which the sheet to be cut is positioned. At the back edge of a shear is a stationary lower blade and a heavy movable upper blade. The upper blade is brought downward clearing the edge of the bed by a carefully controlled clearance. Shearing is sometimes done at the same time as blanking when computerized numerical control (CNC) punch presses are used.

C. PUNCHING

Blanking operations are employed to make the numerous cutouts in the flat sheared pieces of metal that will later be formed into hollow metal doors. Punching operations are accomplished by positioning the metal between the upper and lower components of a die set, usually consisting of lower stationary "die" and an upper movable punch. The punch and die are machined so that they fit together with close clearances and are designed to produce the desired configuration of cut by a single hit. A series of hits using multiple die sets is often used to produce cutouts whose size exceed maxi- mum die size or whose pattern does not conform to typical die shapes.

CNC turret punch presses are also used for blanking operations. A turret press has many die sets loaded in a rotating turret. These machines are also equipped with tables, and work holders to hold flat steel. The work holders move to position the steel sheet to a desired location. While the sheet is held in place, the turret rotates to a specified die and pierces the steel. The process can continue on a repetitive basis until all the punching requirements for a particular sheet are met. Coupled with computer software, turret presses provide "soft-tooling" for the punching of almost unlimited patterns. Numerical control turret presses not only provide for interfacing to computer-aided design, but also result in increased speed and improved accuracy in the fabrication process.









D. FORMING

The basic method of forming is common to all sheet metals and is performed on a machine called press brake. Fabricators of hollow metal doors use a variety of press brake on the manufacturing of their products as this machine offers the widest range of adaptability to forming requirements. Only straight-line bends can be made on the press brake. The bend radius and angle, which are a function of die design, can be varied over a wide range. Almost any configuration can be produced provided it is a single curvature form. In addition to the many standard dies, an infinite variety of specially designed dies may be used and a great many bend configurations can be produced by successive operations employing such dies. Brake forming is an economical method of forming straight-line bends when the quantity of items to be formed ranges from one of a kind to hundreds or even thousands.

E. WELDING

Hollow metal doors are generally assembled by welding. Several types of both fusion

welding and resistance welding are commonly employed in the industry. The usual fusion welding method is metal-arc welding which is either shielded or unshielded. Gas welding is a fusion method with limited use. Spot welding and projection welding are the most commonly used resistance welding method. The amount of welding on hollow metal door varies as the function of application and design. Frame corner joints may be face welding or face and sof- fit welded or fully welded.

1. Fusion Welding

The metal-arc method, using a consumable flux-cored wire, is commonly used to weld the miter and butt joints at the frame corners with the welds usually being on the concealed inner face of the frame members. This method of welding is fast and provides strong joints. With the un-shielded metal-arc method which uses an automatically feed bar electrode in wire form, the arc is enveloped by a stream of inert gas; helium, argon, or a combination of the two and no flux is required.

2. Spot Welding

Spot welding is a type of resistance welding commonly used in the industry to join two overlapping pieces of metal, face to face. It readily permits the joining of different thicknesses of metal without problems of warping or buckling. Spot welding is commonly used to fasten internal stiffeners to door face sheets, connection of closure reinforcements to door and header faces, attach hinge and strike reinforcements and anchors to frames, and to fasten mortar guards to the hinge and strike reinforcements.

3. Projection Welding

Projection welding is another form of resistance welding. The part to be attached by projection welding must first have a small projection of the proper size formed on it wherever the weld is to be made. Several welds can be made simultaneously at each such projection. This type of welding is often used to fasten hinge and strike reinforcement on doors and frames, and floor anchors to the backsides of frames.

F. PRIME PAINTING

Prior to prime painting, a thorough cleaning of the metal is of critical importance. All surface contaminants such as rust, loose mill scale, grease, oil, and weld deposits must be entirely removed to insure complete adhesion of the primer coat.

Cleaning is accomplished by various methods such as steam cleaning, hot water wash, or other single or multiple stage solvent cleaning systems.

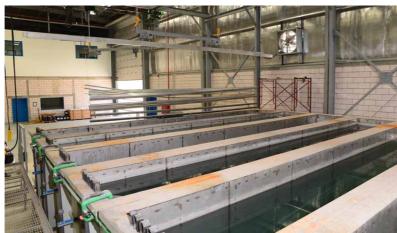
After appropriate metal preparation, exposed surfaces of doors and frames shall receive a rust inhibitive primer. Application methods vary depending on the fabricators practices, facilities, and the size and number of items being painted. Among the most common methods are conventional spraying, airless spraying, electrostatic spraying, and flow coating. After application, the paint may be airdried or heat cured.











Powder coating is a **dry finishing process that has become extremely popular** since its introduction in North America over 40 years ago. Representing over 15% of the total industrial finishing market, powder is used on a wide array of products.

More and more companies specify powder coatings for a high-quality, durable finish, allowing for maximized production, improved efficiencies, and simplified environmental compliance. Used as functional (protective) and decorative finishes, powder coatings are available in an almost limitless range of colors and textures, and technological advancements have resulted in excellent performance properties.

How Powder Coating Works

Powder coatings are based on polymer resin systems, combined with curatives, pigments, leveling agents, flow modifiers, and other additives. These ingredients are melt mixed, cooled, and ground into a uniform powder similar to baking flour. A process called electrostatic spray deposition (ESD) is typically used to achieve the application of the powder coating to a metal substrate. This application method uses a spray gun, which applies an electrostatic charge to the powder particles, which are then attracted to the grounded part. After application of the powder coating, the parts enter a curing oven where, with the addition of heat, the coating chemically reacts to produce long molecular chains, resulting in high cross-link density. These molecular chains are very resistant to breakdown. This

type of application is the most common method of applying powders. Powder coatings can also be applied to non-metallic substrates such as plastics and medium density fiberboard (MDF).

Sometimes a powder coating is applied during a fluidized bed application. Preheated parts are dipped in a hopper of fluidizing powder and the coating melts, and flows out on the part. Post cure may be needed depending on the mass and temperature of the part and the type of powder used. No matter which application process is utilized, powder coatings are easy to use, environmentally friendly, cost effective, and tough!

Durability of Powder Coating

Powder coating is a high-quality finish found on thousands of products you come in contact with each day. Powder coating protects the roughest, toughest machinery as well as the household items you depend on daily. It provides a more durable finish than liquid paints can offer, while still providing an attractive finish. Powder coated products are more resistant to diminished coating quality as a result of impact, moisture, chemicals, ultraviolet light, and other extreme weather conditions. In turn, this reduces the risk of scratches, chipping, abrasions, corrosion, fading, and other wear issues.

It's tough. It looks great. And it lasts a long, long time. In addition to being durable, powder coating is an attractive choice due to environmental advantages.

- Today, practically all powder coatings are applied using an electrostatic spraying process.
 A common factor with all such processes is that the powder particles are electrically charged whilst the object requiring coating remains earthed. The resultant electrostatic attraction being adequate to allow the buildup of sufficient film of powder on the object, thus holding the dry powder in place until melting occurs with subsequent binding to the surface.
- Powder particles are electrostatically charged using one of the following techniques:
- Conventional Electrostatic Charging (Corona Charging) by passing the powder through a high-voltage electrostatic field.
- Friction Charging (Tribostatic Charging) which generates an electrostatic charge on the powder as it rubs against an insulator.
- Resin is always present and comes in two types; polyester and epoxy.Curing agents are added to bind the coating.

- For polyesters, primid curing agents are used. For epoxies, dicyandiamide curing agents are used. Hybrid curing agents are also occasionally used, which contain different quantities of the primid and dicyandiamide curing agents.
- There are various additives that are often used with a wide range of properties. Some of these give the powder a matt effect and others create a hardened finish, for example.
- Post additives prevent the powder from caking and are added when the powder is hard and broken into small chips.
- Tint pigments are also added to the mix. There are two types; inorganic, which are generally pale and dull and organic, which are more brightly coloured.
- Extenders (fillers) are added to reduce glossiness and supply the coating with extra durability.

The quantity of each ingredient differs depending on a number of factors.

The powder may be thermoplastic (becomes soft, remoldable and weldable when heat is added) or thermoset polymer (can not be welded or remolded when heated).







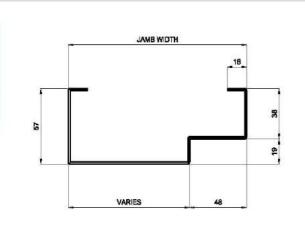


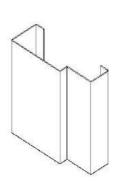
General

Product Summery

Cable Tray & IT Cabinet

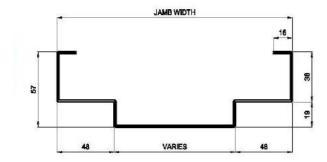


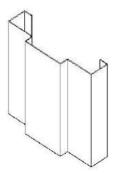




SRF

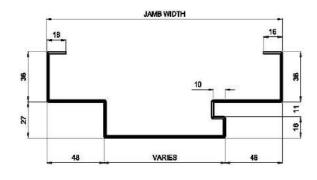
SINGLE REBATE FLUSH

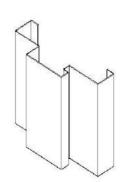




DRF

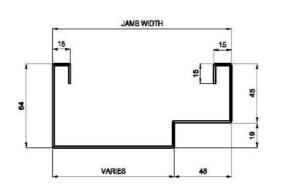
DOUBLE REBATE FLUSH

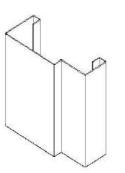




DRGF

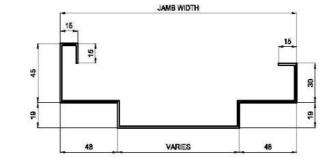
DOUBLE REBATE GROOVE FLUSH

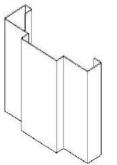




SRW

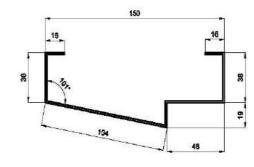
SINGLE REBATE WRAP AROUND

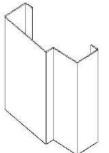




DHW

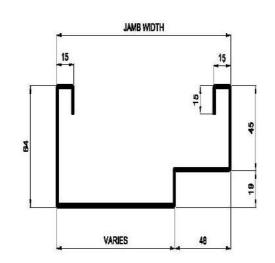
DOUBLE REBATE HALF WRAP AROUND

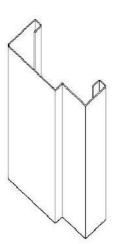




STF

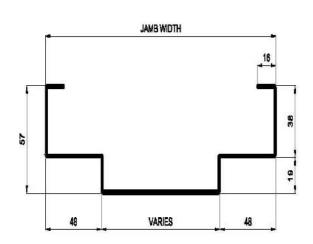
SINGLE TAPER FLUSH

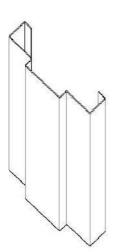




SRW

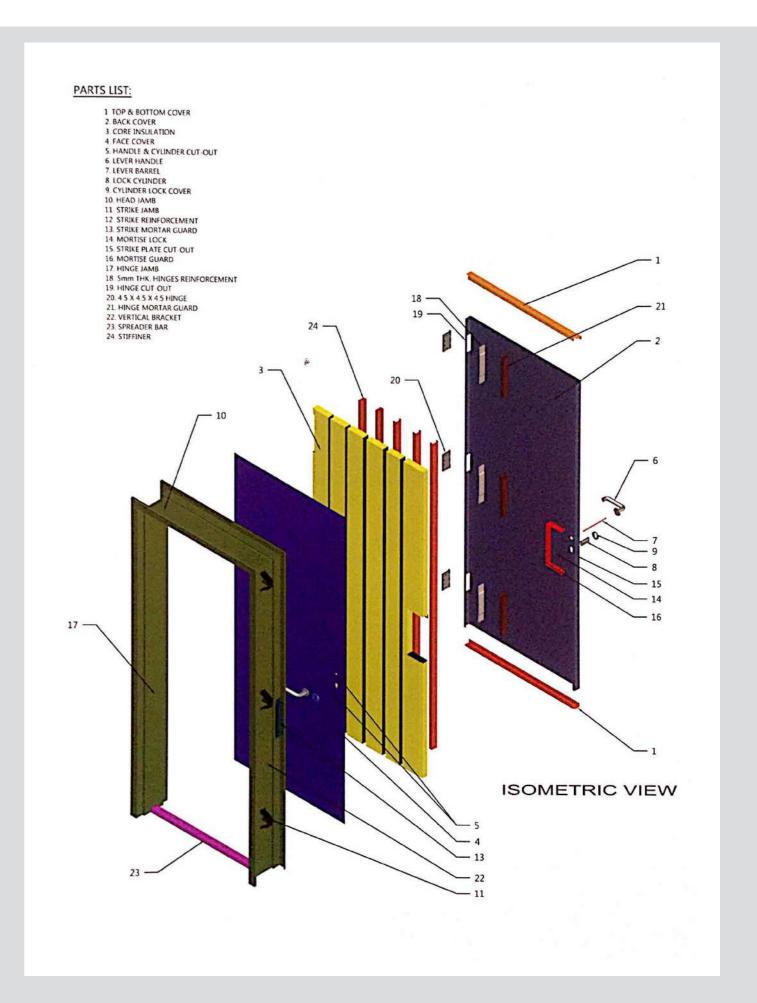
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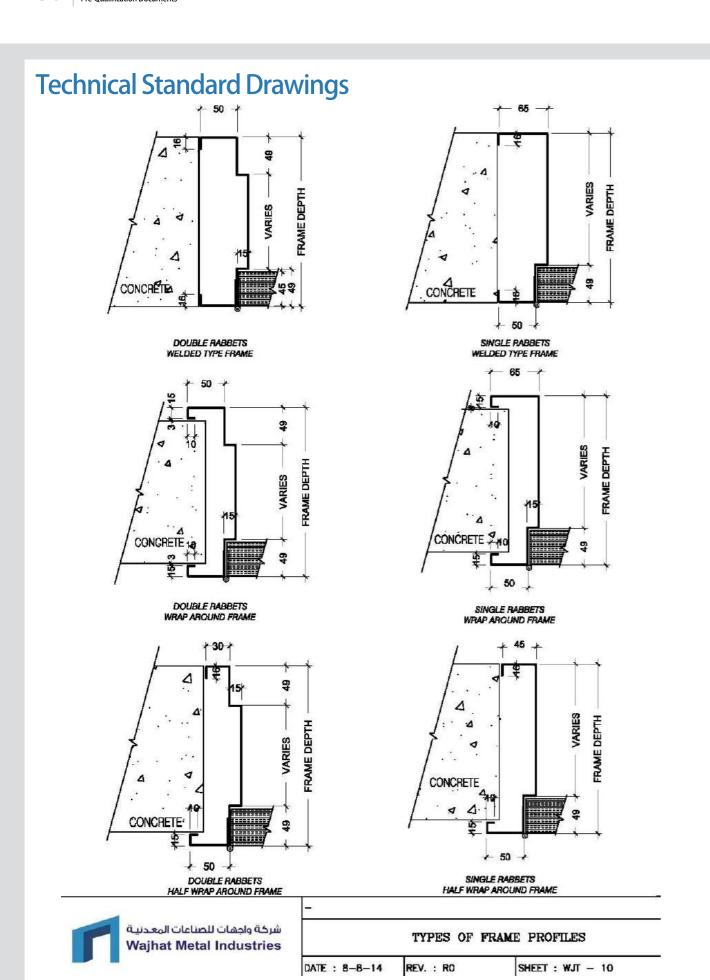


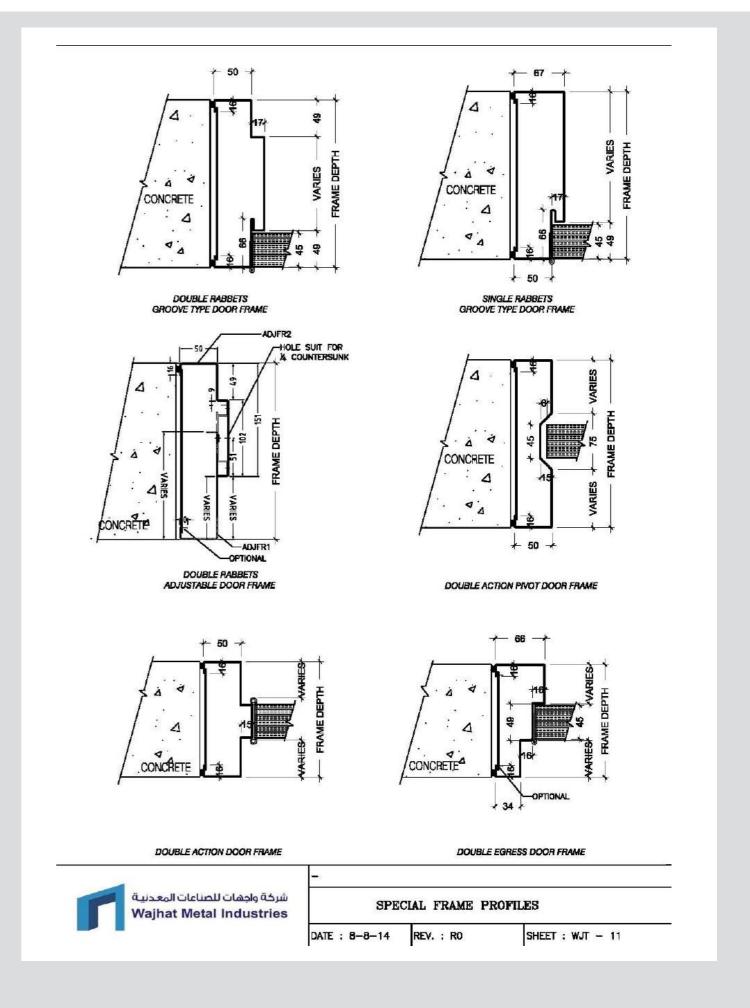


DRF

DOUBLE REBATE FLUSH







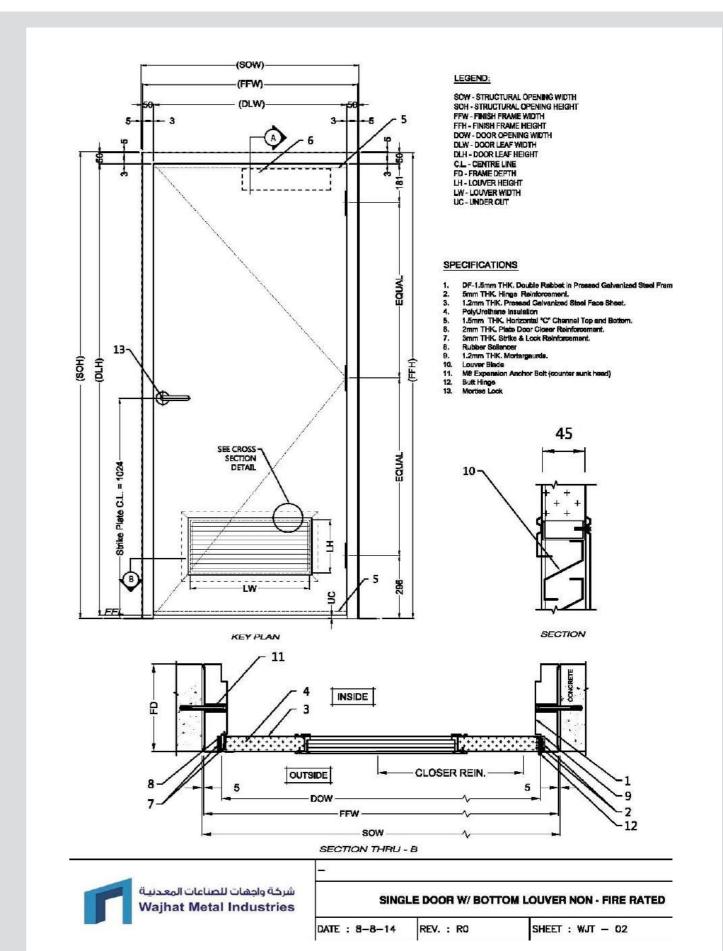
DATE : 8-8-14 REV. : 0

SINGLE DOOR W/ NARROW LITE - FIRE RATED

SHEET: WJT - 01

شركة واجهات للصناعات المعدنية

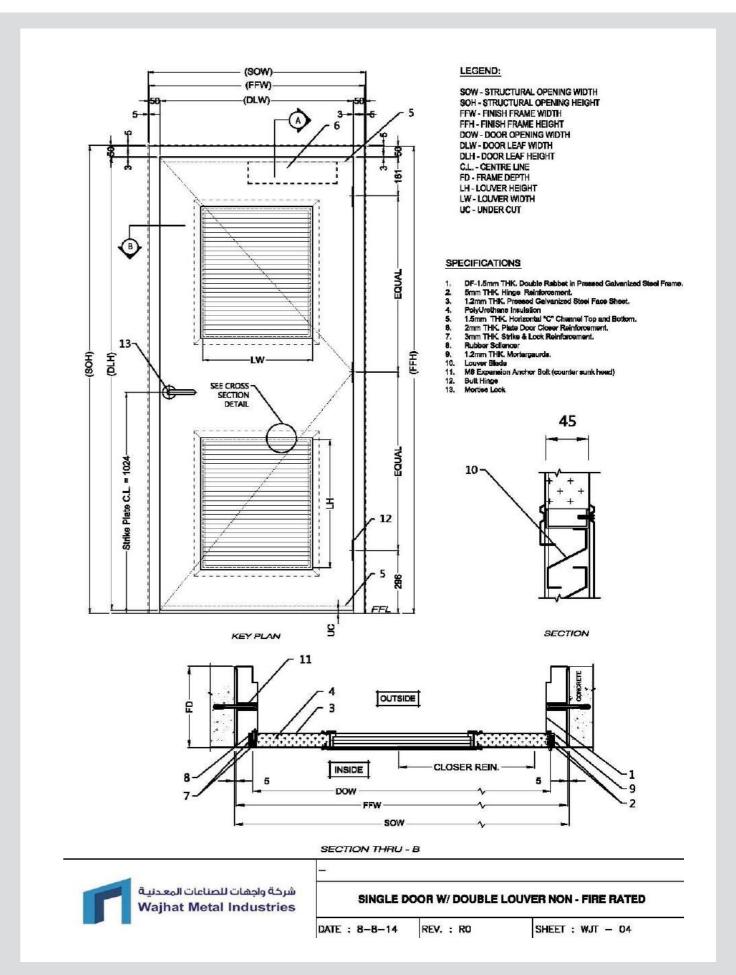
Wajhat Metal Industries

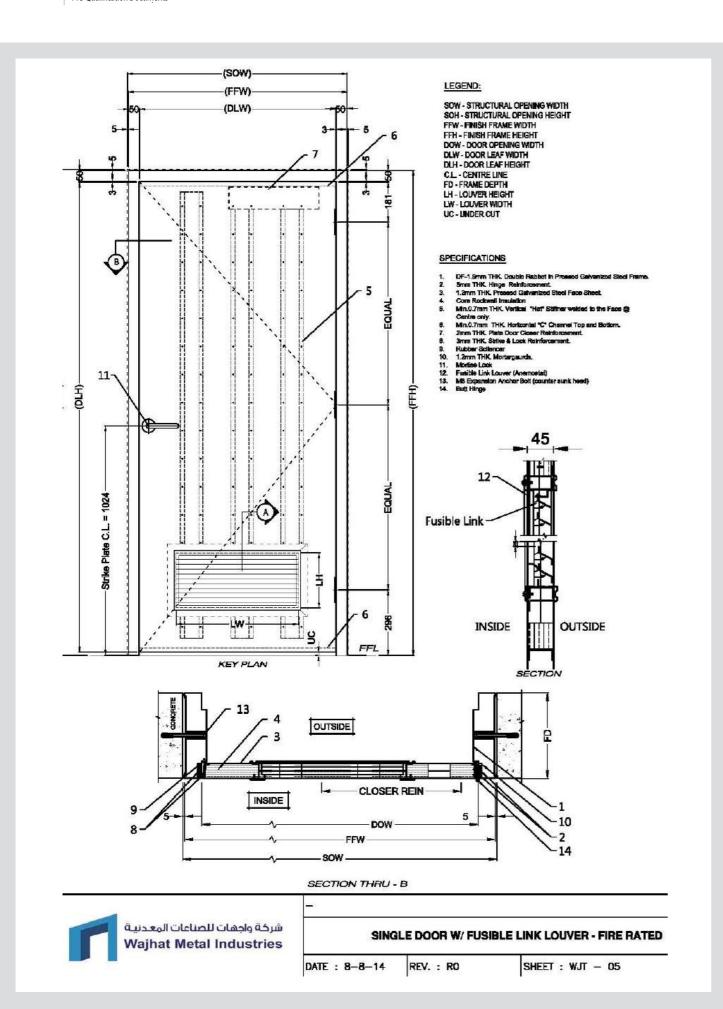


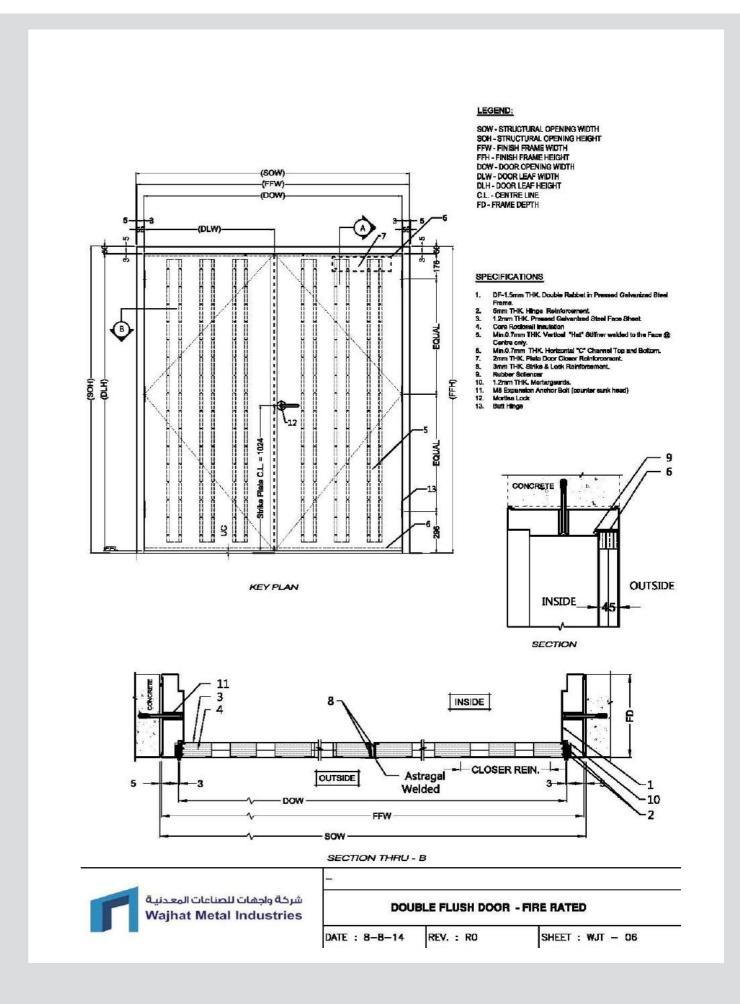
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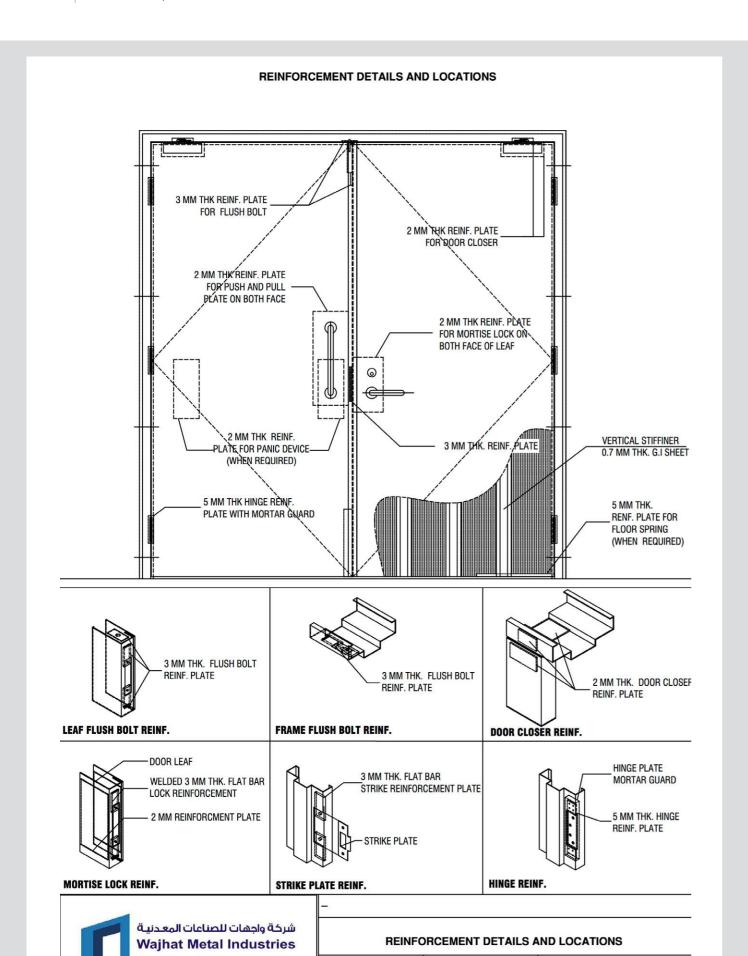
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Wajhat Metal Industries





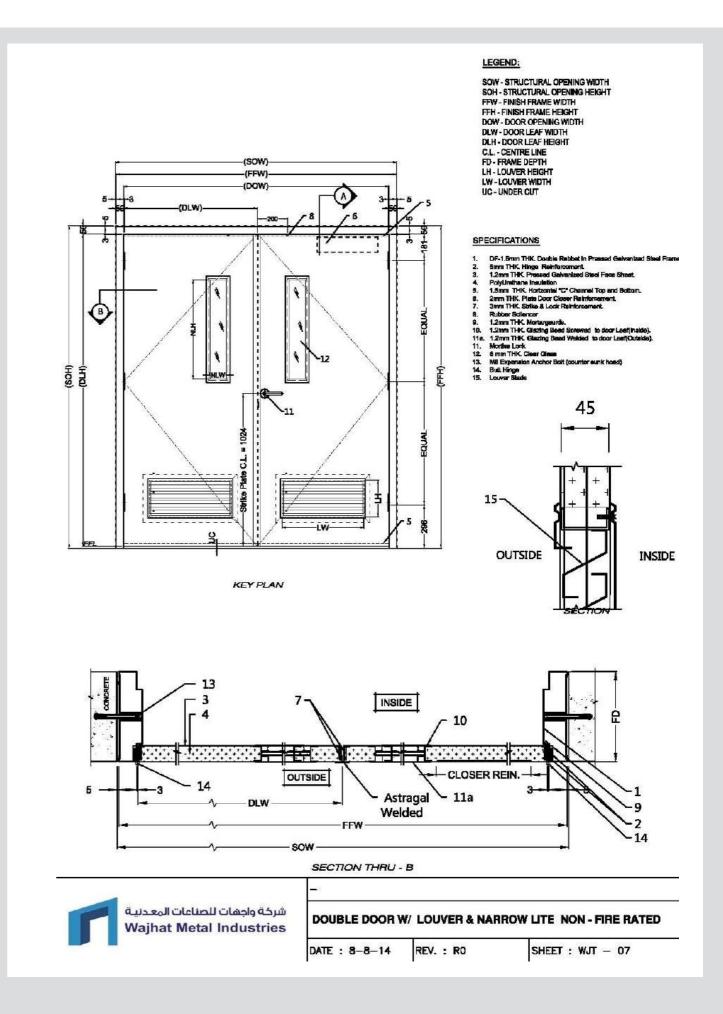


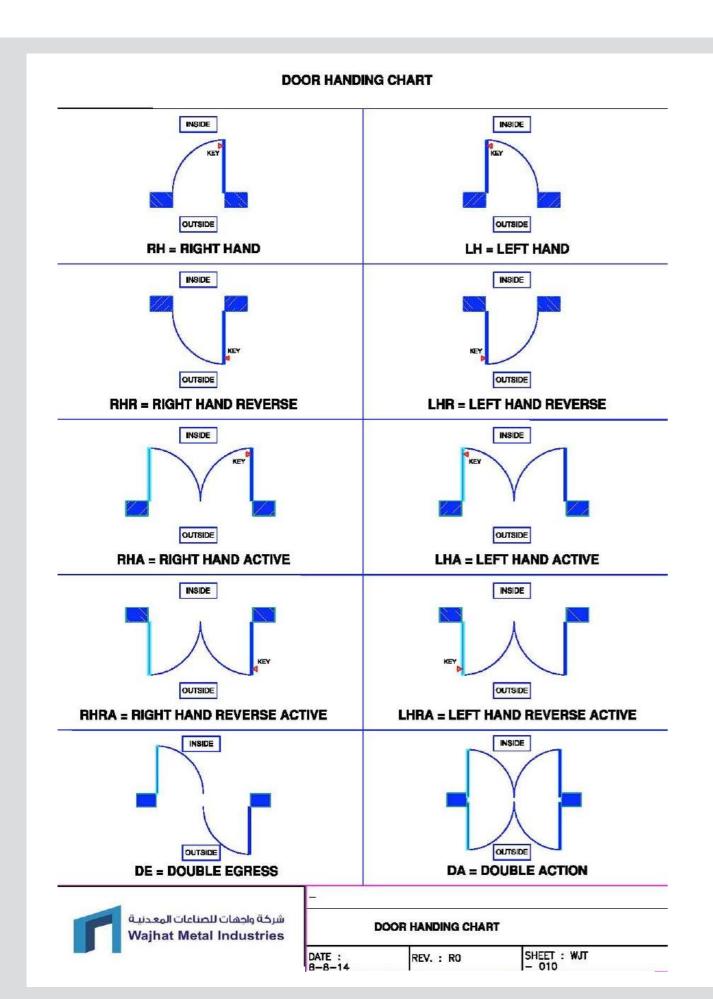


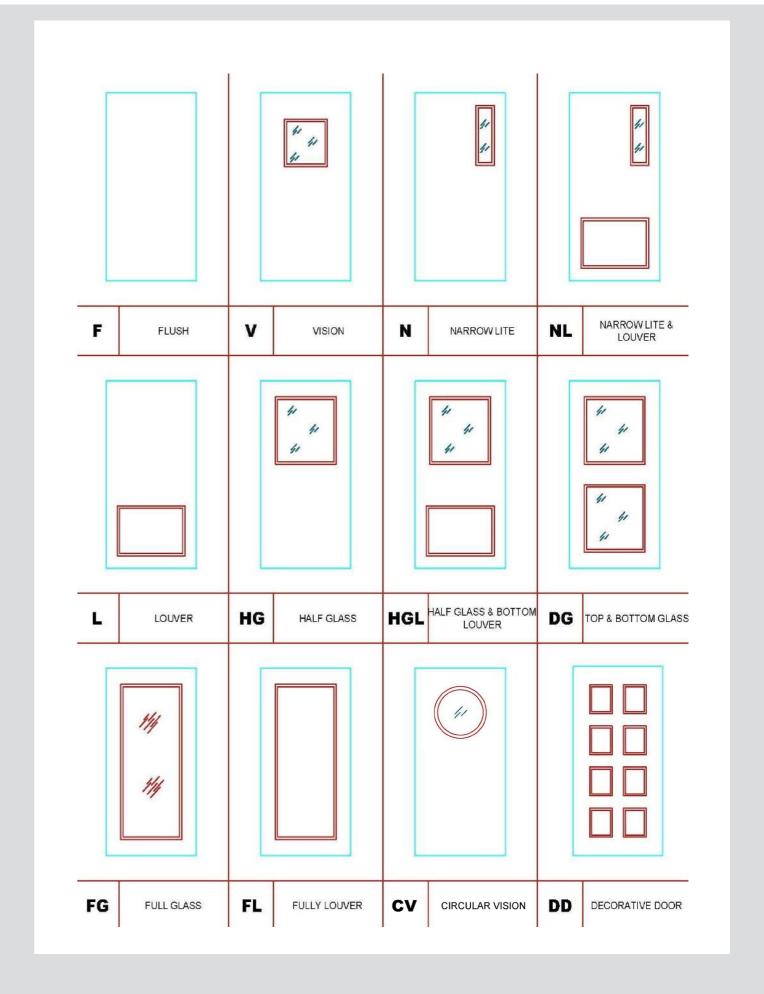
DATE : 8-8-14

REV. : RO

SHEET : WJT







WAJHAT METAL INDUSTRIES



PLANT & MACHINES



General

Product

Plant & Machines

Cable Tray

67



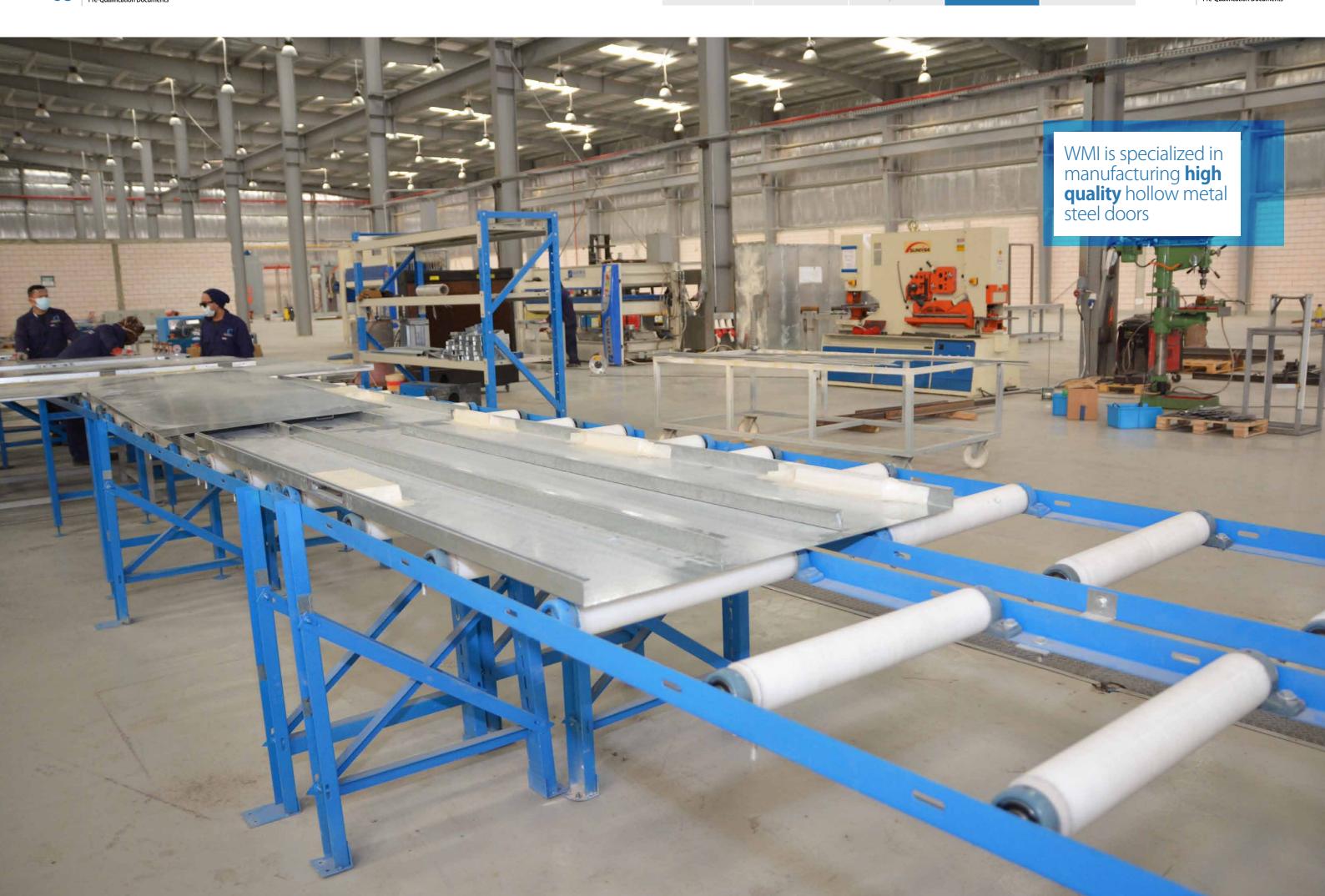
Conoral

Product

Plant & Machines

Cable Tray

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Plant & Machines



Wajhat Metal Industries Pre-Qualification Documents

Plant & Machines



Wajhat Metal Industries Pre-Qualification Documents

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Product

Plant & Machines

Cable Tray

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Wajhat Metal Industries Pre-Qualification Documents



Wajhat Metal Industries Pre-Qualification Documents

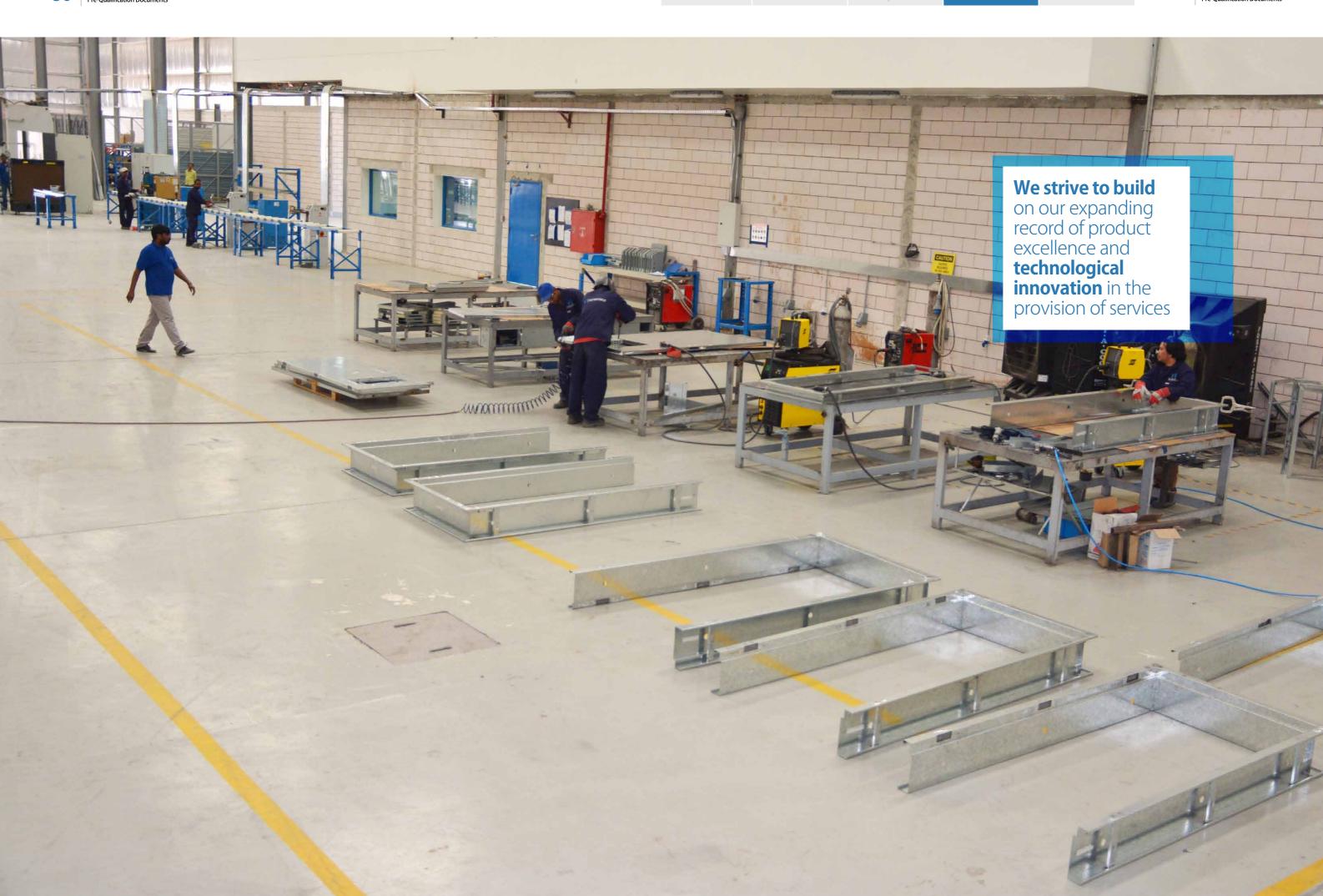
Plant & Machines



Wajhat Metal Industries Pre-Qualification Documents



Wajhat Metal Industries Pre-Qualification Documents Conoral



Wajhat Metal Industries Pre-Qualification Documents

Plant & Machines



Wajhat Metal Industries Pre-Qualification Documents

MACHINES

- 1. LVD **Shearing Machine**
- 2. LVD Punching Machine
- 3. TRUMPF Punching Machine
- 4. LVD Press brake
- YSD Press brake
- 6. Sunrise **Hydraulic Iron worker**
- 7. Kuper **Notching Machine VN 2006**
- 8. KIK Drilling Tapping Machine Model H-7150
- 9. Thomas Cutting machine New 33 Minor
- 10. Hack Sawing Hack Saw Machine
- 11. Dirinler Power Press
- 12. Telwin Plasma Cutting Machine
- 13. LORS Dual-Gun Resistance Welder Model 771
- 14. LORS Dual-Gun Resistance Welder Model 145
- 15. LORS Resistance Welder Model 856

- 16. LORS End Channel Welder Model 734
- 17. LORS/TECHNA Rocker Arm-Type Welder Model 4609NA
- 18. LORS **8 Gun Resistance Welding Machine**
- 19. MAC Machine Tools **Spot Gun DN-161-**
- 20. Ceaweld Spot Gun NKLP48
- 21. Telwin Arc Welding Machine Liner 630 HD
- 22. Telwin Arc Welding Machine Liner 530 HD
- 23. Telwin _ MIG Welding Machine Master MIG 400
- 24. Telwin _ MIG Welding Machine Master MIG 2702/
- 25. Reactor **Foaming Machine**
- 26. Orma Hot Press Machine

LVD-MVS-TS- 13/62 SHEARING MACHINE

Plant & Machines



Wajhat Metal Industries

Pre-Qualification Documents

: LVD Manufacturer

Model No : MVS-TS 13/62 Specification : Capacity 636 KN

Description : This machine is used for sheet metal shearing operations.

Capacity: : Max. Sheet Thickness 13mm. Max. Length 6200mm

LVD - V20 - 1525 CNC TURRET PUNCHING



Manufacturer : LVD

Model No : 127563 V20/1525 **Specification** : 480 V 3 Phases

Description : This machine is used for punching, based on CNC programing. It can punch

max size of 1524 x 2500mm with 200kN.

TRUMPF 3000 CNC PUCNHING MACHINE



Manufacturer : TRUMPF Model No : 3000

Specification : Capacity 160 Ton

Description : This machine is used for punching, based on CNC programing. It can punch max size of 1550 x 3050mm with 180kN.

LVD - PPEB - 220/61 PRESS BRAKE



Manufacturer : LVD

Model No : PPEB 220/61
Specification : Capacity 2200 KN

Description : This machine is used for bending parts with minimum setup time with a

pressing force of 2200kN and 6100mm length.

YSD PRESS BRAKE



Manufacturer : YSD : HPS 135/30

Specification : 400V – 3 Phases - 60HZ

Description : This machine is used for bending parts with minimum setup time with a

pressing force of 1350kN, and 3000mm length

SUNRISE - HYDRALIC IRON WORKS



Manufacturer: SUNRISEModel No: IW- 165SDSpecification: Capacity 160 Ton

Description : This machine is used for hole punching and sheet cutting. The machine

punching capacity of 160kN.

Wajhat Metal Industries
Pre-Qualification Documents

General

NOTCHING MACHINE



Manufacturer: KUPERModel No: VN 2006

Specification : 430V 3PHASE 60HZ

Description : This machine is used for sheet notching. The machine working piece

maximum thickness 4 mm.

KIK - MULTIPLE DRILL & TAPPING MACHINE



Manufacturer: KIKModel No: H7150Specification: P 1.5 KW

Description : This machine is used for drilling & tapping the reinforcement plates.

THOMAS - CUTTING MACHINE



Manufacturer : THOMAS

Model No : IW- NEW 33 MINOR

Specification : 230-400V 3 Phases - 50/60HZ

Description: This machine is used for cutting. The machine is heavy duty for cutting

C-channel, L-angle and I-beams.

HACKSAW MACHINE



Manufacturer: FREJOTHModel No: REX-450AESpecification: P 220V

Description : This machine is used for cutting 45° and 90° flat bar and tubes.

DIRINLER - POWER PRESS MACHINE



Manufacturer : DIRINLER Model No : CDCS 800 P

Specification : 400V 3PHASE 50 /60HZ

Description : This machine is used for jozzling ,hole punching and bending with tools, The machine nominal force 80kN. .

PLASMA - CUTTING MACHINE



Manufacturer : TELWIN

Model No : SUPER PLASMA 80/3HF Specification : 230-400V 3PHASE 50/60HZ

Description : This machine is used for heavy thickness material cutting. The machine

pressure 8 bar.

LORS DUAL - GUN PROJECTION WELDER



Manufacturer: LORSModel No: 771Specification: 380V 60HZ

Description : This machine is used for welding hinge reinforcements plates for door jambs.

it is working with copper electrode tool.

LORS DUAL - GUN RESISTANCE PROJECTION



Manufacturer : LORS
Model No : 145
Specification : 380V 60HZ

Description : This machine is used for projection welding of hinge reinforcements to door skins.

It is working with copper electrode tool.

LORS - RESISTANCE PROJECTION



: TELWIN Manufacturer **Model No** : 856 **Specification** : 380V 60HZ

Description : This machine is used for projection welding lock box and hinge reinforcement to door edges using water cooled electrode holder.

LORS - PROJECTION



Manufacturer : LORS **Model No** : 734 **Specification** : 380V 60HZ

Description

: This machine is used for end channel welding using weld guns, air operated, reciprocating type and electrode holders.

LORS ROCKER ARM - TYPE SPOT WELDER



Manufacturer : LORS **Model No** : 4609NA Specification : 220V 60HZ

Description : This machine is used for hinge covers spot welding of frames with water cooled arms and tip holders.

LORS GUN RESISTANCE - WELDING MACHINE



Manufacturer : LORS

Specification

Model No : 8 GUN RESISTANCE WELDING

: 380V 60HZ

Description : This machine is used for spot welding of hat reinforcements (ribs) for door panel using bottom water cooled die holder and replaceable long life weld die.

SPOT GUN - MAC MACHINE TOOLS



: MAC Manufacturer **Model No** : DN-16-1 **Specification** : 220V 60HZ

Description : This machine is used for spot welding using water cooled arms and tip

SPOT GUN - CEAWELD



Manufacturer : CEAWELD **Model No** : NKLP48 EN62135-1 **Specification** : Capacity 160 Ton

Description : This machine is used for spot welding using water cooled arms and tip

holders.

ARC - WELDING MACHINE



Manufacturer : TELWIN **Model No** : LINEAR 630HD

Specification : 230- 400V 3 Phases - 50- 60HZ

Description : This machine is used for Arc welding using welding rods

for heavy fabrication.

ARC - WELDING MACHINE



Manufacturer : TELWIN **Model No** : LINEAR 530HD

Specification : 230-400V 3PHASE 50-60HZ

Description : This machine is used for Arc welding. The machine is using welding

rods for heavy fabrication.

MIG, MAG/FCAW - WELDING MACHINE



Manufacturer

: TELWIN

Model No : MASTER MIG 400

Specification Description

: 230-400V 3PHASE 50-60HZ

: This machine is used for MIG welding. Using welding wire and it is used for frame assembly.

MIG - WELDING MACHINE



Manufacturer : TELWIN

Model No : IW- MASTER MIG 270/2
Specification : 230-400V 3PHASE 50-60HZ

Description : This machine is used for MIG welding using welding wire and it is used

for frame assembly.

GRACO - FOAMING MACHINE REACTOR



Manufacturer : GRACO REACTOR

Model No : E-30

Specification : 400V 3PHASE+N

Description : This machine is used for foaming. The machine is working with air

pressured chemical inject gun.

ORMA - HOT PRESS MACHINE



Manufacturer : ORMA

Model No : NPC/DIGIT 3000/S AS-BO

Specification : 400V 50HZ

Description : This machine is used for door pressing, using pneumatic systems for

doors levelling after foaming.

WAJHAT METAL INDUSTRIES

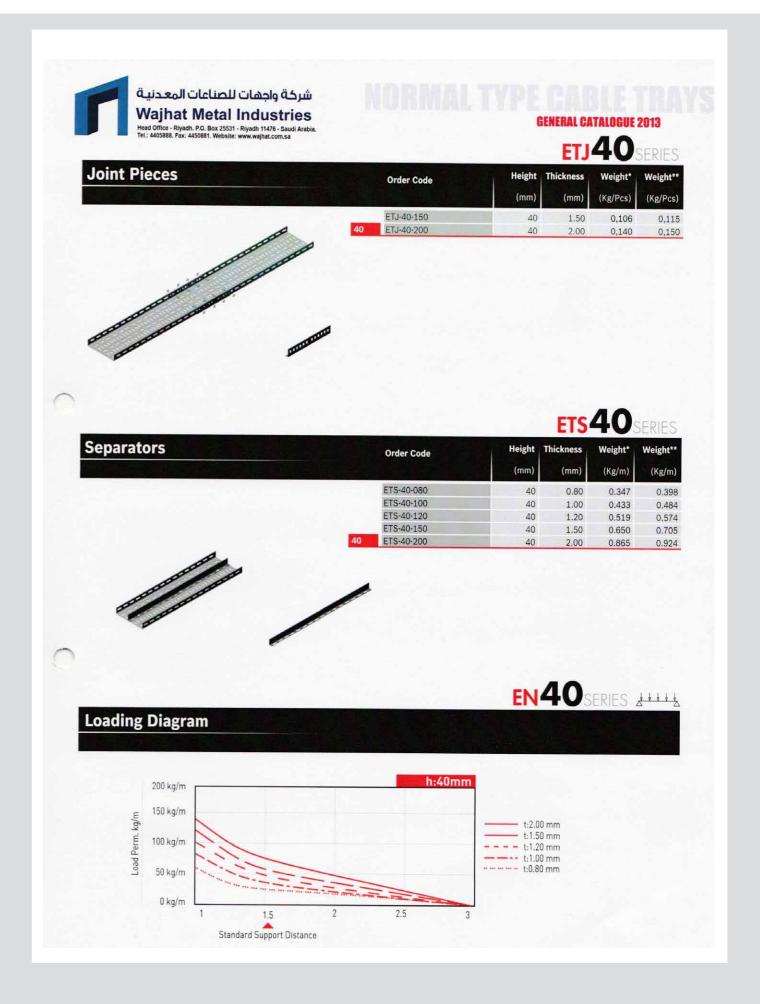


(OTHER PRODUCTS)

CABLE TRAY

AND IT CABINET









		HB	40	SERIES	4
90° Horizontal Bends	Order Code		Thickness		
THE RESERVE OF THE PARTY OF THE	A Service Comment of the Control of	(mm)	(mm)	(Kg/Pcs)	(Kg
	ET OFOIO 1 FOUR		1.50	0.507	

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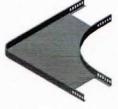
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05040-150HB	55	1.50	0,567	0,614
	ET-10040-150HB	105	1.50	0,791	0,857
	ET-15040-150HB	155	1,50	1,072	1,162
	ET-20040-150HB	205	1.50	1,415	1,534
1.50	ET-25040-150HB	255	1.50	1,815	1,968
	ET-30040-200HB	305	2.00	2,751	2,957
	ET-40040-200HB	405	2.00	4,161	4,467
	ET-50040-200HB	505	2.00	5,886	6,313
2.00	ET-60040-200HB	605	2.00	7,924	8,494



Please specify a, b dimensions in your private orders.



90° Horizontal Bends (R=300)		Order Code	Width	Thickness	Weight*	Weight**
Mark Colored Colored Colored			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		ET-05040-150HB/300R	55	1.50	1,750	1,897
		ET-10040-150HB/300R	105	1.50	2,268	2,460
		ET-15040-150HB/300R	155	1.50	2,845	3,085
		ET-20040-150HB/300R	205	1.50	3,481	3,775
	1.50	ET-25040-150HB/300R	255	1.50	4,175	4,529
THE PARTY OF THE P		ET-30040-200HB/300R	305	2.00	6,069	6,512
The state of the s		ET-40040-200HB/300R	405	2.00	8,265	8,862
		ET-50040-200HB/300R	505	2.00	10,775	11,547



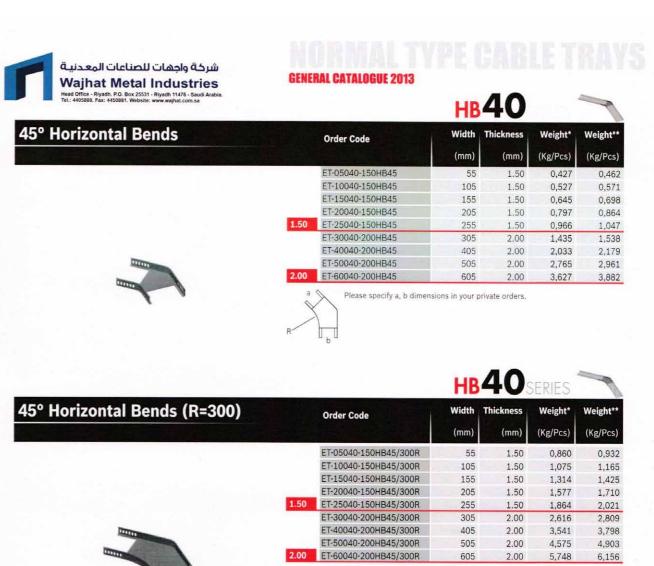
2.00	ET-60040-200HB/300R	605	2.00
I	Please specify a, b dimer	nsions in your pr	ivate order
R/			

HB40series ◀



13,598 14,567

						-
90° Horizontal Bends (R=600)		Order Code	Width Thickness (mm) (mm)		Weight*	Weight**
			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		ET-05040-150HB/600R	55	1.50	3,594	3,898
		ET-10040-150HB/600R	105	1.50	4,467	4,845
		ET-15040-150HB/600R	155	1.50	5,395	5,853
		ET-20040-150HB/600R	205	1.50	6,385	6,926
	1.50	ET-25040-150HB/600R	255	1.50	7,433	8,063
		ET-30040-200HB/600R	305	2.00	10,620	11,38
		ET-40040-200HB/600R	405	2.00	13,757	14,738
		ET-50040-200HB/600R	505	2.00	17,209	18,430
	2.00	ET-60040-200HB/600R	605	2.00	20,975	22,457









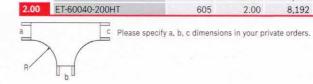


Please specify a, b dimensions in your private orders.



HT40series

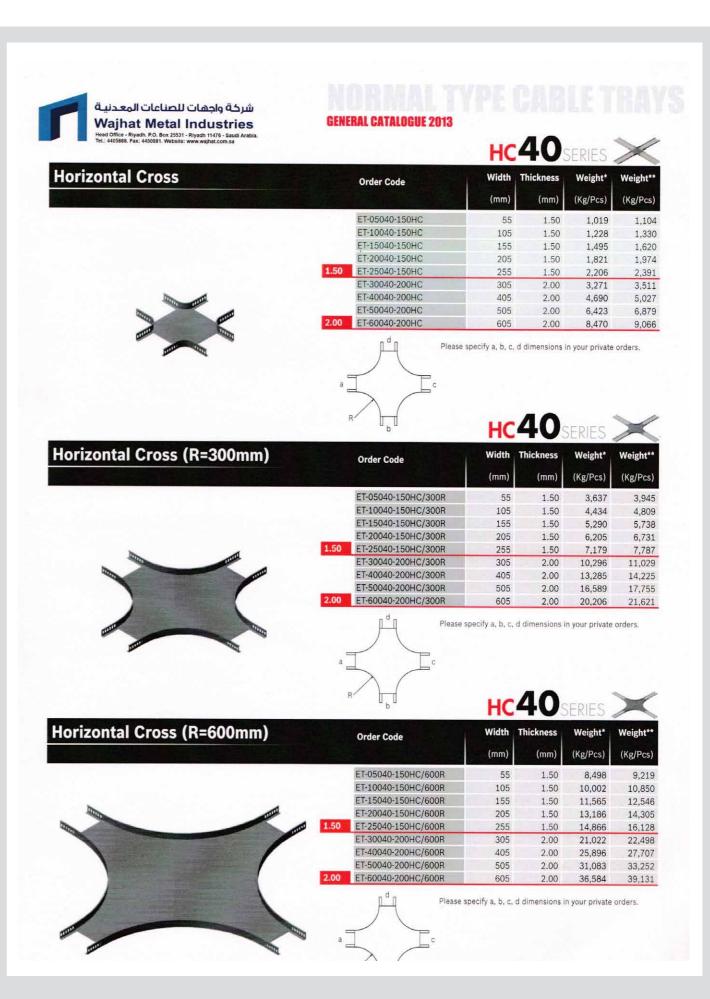
Horizontal Tees	Order Code	Width	Thickness	Weight*	Weight**
CONTRACTOR OF THE STATE OF THE		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05040-150HT	55	1.50	0,792	0,858
	ET-10040-150HT	105	1.50	1,008	1,092
	ET-15040-150HT	155	1.50	1,283	1,390
	ET-20040-150HT	205	1.50	1,617	1,753
1.50	ET-25040-150HT	255	1.50	2,010	2,179
	ET-30040-200HT	305	2.00	3,005	3,228
	ET-40040-200HT	405	2.00	4,420	4,741
	ET-50040-200HT	505	2.00	6,149	6,590
2.00	ET-60040-200HT	605	2.00	8,192	8,774



		HT	40s	ERIES .	1
Horizontal Tees (R=300mm)	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05040-150HT/300R	55	1.50	2,643	2,866
	ET-10040-150HT/300R	105	1.50	3,301	3,580
	ET-15040-150HT/300R	155	1.50	4,017	4,357
	ET-20040-150HT/300R	205	1.50	4,793	5,198
	1.50 ET-25040-150HT/300R	255	1.50	5,627	6,103
THE REAL PROPERTY OF THE PERTY	ET-30040-200HT/300R	305	2.00	8,097	8,681
7000	ET-40040-200HT/300R	405	2.00	10,690	11,454
	ET-50040-200HT/300R	505	2.00	13,596	14,561
	2.00 ET-60040-200HT/300R	605	2.00	16,817	18,004



		HT	40	SERIES	1
Horizontal Tees (R=600mm)	Order Code	Width	Thickness	Weight*	Weight**
A CONTRACTOR OF THE STATE OF TH		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05040-150HT/600R	55	1.50	5,702	6,186
	ET-10040-150HT/600R	105	1.50	6,890	7,474
	ET-15040-150HT/600R	155	1.50	8,136	8,826
	ET-20040-150HT/600R	205	1.50	9,442	10,242
	1.50 ET-25040-150HT/600R	255	1.50	10,806	11,72
	ET-30040-200HT/600R	305	2.00	15,327	16,41
	ET-40040-200HT/600R	405	2.00	19,333	20,69
	ET-50040-200HT/600R	505	2.00	23,652	25,31
	2.00 ET-60040-200HT/600R	605	2.00	28,286	30,270



Reducting Plate



RC40series

	Order Code	Width	Width Thickness Weight		Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10040-150RC	105	1.50	0,547	0,593
	ET-15040-150RC	155	1.50	0,759	0,823
	ET-20040-150RC	205	1.50	1,046	1,134
1.50	ET-25040-150RC	255	1.50	1,367	1,482
	ET-30040-200RC	305	2.00	2,102	2,262
	ET-40040-200RC	405	2.00	3,266	3,508
	ET-50040-200RC	505	2.00	4,791	5,140
2.00	ET-60040-200RC	605	2.00	6,632	7,110

RR40series

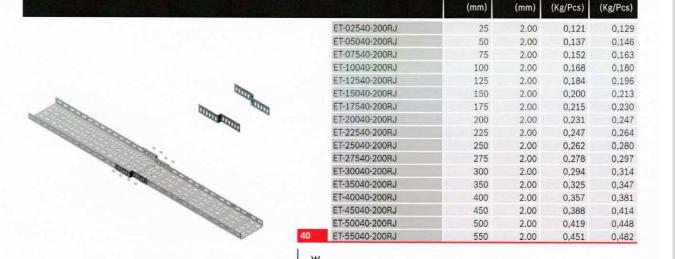
				A-1717-PA	
Reducers (Right)	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10040-150RR	105	1.50	0,547	0,593
	ET-15040-150RR	155	1.50	0,762	0,826
	ET-20040-150RR	205	1.50	1,034	1,121
	1.50 ET-25040-150RR	255	1.50	1,368	1,483
	ET-30040-200RR	305	2.00	2,102	2,262
	ET-40040-200RR	405	2.00	3,271	3,513
	ET-50040-200RR	505	2.00	4.795	5,144
	2.00 ET-60040-200RR	605	2.00	6,635	7,114

		RL	40	SERIES	1
Reducers (Left)	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10040-150RL	105	1.50	0,547	0,593
	ET-15040-150RL	155	1.50	0,762	0,826
	ET-20040-150RL	205	1.50	1,034	1,121
	1.50 ET-25040-150RL	255	1.50	1,368	1,483
	ET-30040-200RL	305	2.00	2,102	2,262
	ET-40040-200RL	405	2.00	3,271	3,513
	ET-50040-200RL	505	2.00	4,795	5,144
	2.00 ET-60040-200RL	605	2.00	6,635	7,114



GENERAL CATALOGUE 2013

Order Code





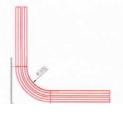


Attention!



We have to prefer products with suitable radius to get max. performance from energy transmission and make mounting easier.







IR40series (

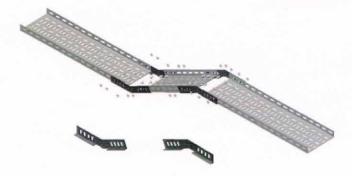
Adjustable Internal Risers	Order Code Sipariş Kodu	Width Genişlik (mm)	Thickness Kalınlık (mm)	Weight* Ağırlık (Kg/Pcs)	Weight** Ağırlık (Kg/Pcs)
	EN-05040-150IR	50	1.50	1,128	1,224
	EN-10040-150IR	100	1.50	1,591	1,726
	EN-15040-150IR	150	1.50	2,055	2,229
	EN-20040-150IR	200	1.50	2,128	2,309
ASIN .	1.50 EN-25040-150IR	250	1.50	2,913	3,160
	EN-30040-200IR	300	2.00	4,717	5,039
	EN-40040-200IR	400	2.00	6,128	6,546
INTERNAL CONTRACTOR	EN-50040-200IR	500	2.00	7,341	7,842
2121	2.00 EN-60040-200IR	600	2.00	8,753	9,351

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Adjustable External Risers	Order Code Sipariş Kodu	Width Genişlik (mm)	Thickness Kalınlık (mm)	Weight* Ağırlık (Kg/Pcs)	Weight** Ağırlık (Kg/Pcs)	
	EN-05040-150ER	50	1.50	1,175	1,275	
	EN-10040-150ER	100	1.50	1,638	1,777	
	EN-15040-150ER	150	1.50	2,102	2,280	
	EN-20040-150ER	200	1.50	2,175	2,360	
	1.50 EN-25040-150ER	250	1.50	2,960	3,211	
	EN-30040-200ER	300	2.00	4,779	5,105	
	EN-40040-200ER	400	2.00	6,190	6,613	
TE EM	EN-50040-200ER	500	2.00	7,403	7,908	
	2.00 EN-60040-200ER	600	2.00	8,815	9,417	

	-	-			
10	/				
16	-	w	18	FR	1

Level Changing Parts		Order Code Sipariş Kodu	Width Genişlik (mm)		Weight* Ağırlık (Kg/Set)	Ağırlık
	2.00	ETLC-40-200	40	2.00	0,308	0,329





NORMAL TYPE CABLE TRAYS

GENERAL CATALOGUE 2013

VT40series

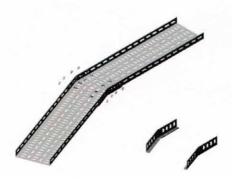
Vertical Tees	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05040-150VT	55	1.50	0,800	0,868
	ET-10040-150VT	105	1.50	1,438	1,560
	ET-15040-150VT	155	1.50	2,357	2,557
	ET-20040-150VT	205	1.50	3,267	3,545
	1.50 ET-25040-150VT	255	1.50	4,564	4,952
	ET-30040-200VT	305	2.00	7,523	8,036
	ET-40040-200VT	405	2.00	11,895	12,707
	ET-50040-200VT	505	2.00	17,119	18,286
	2.00 ET-60040-200VT	605	2.00	22,688	24,236

EP40 SERIES

End Parts	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05040-150EP	55	1.50	0,104	0,113
	ET-10040-150EP	105	1.50	0,128	0,139
	ET-15040-150EP	155	1.50	0,151	0,164
	ET-20040-150EP	205	1.50	0,175	0,190
1.5	0 ET-25040-150EP	255	1.50	0,198	0,215
8 0	ET-30040-200EP	305	2.00	0,296	0,317
	ET-40040-200EP	405	2.00	0,359	0,384
2.0	ET-50040-200EP	505	2.00	0,422	0,451
2.0	0 ET-60040-200EP	605	2.00	0,485	0,518

DC40 SERIES

Direction Changing Parts	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	2.00 ETDC-40-200	40	2.00	0,140	0,150

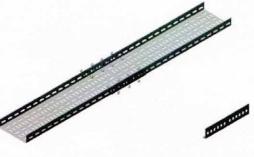




GENERAL CATALOGUE 2013

WTJ 50 SERIES

Joint Pieces		Order Code	Height	Thickness	Weight*	Weight**
			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		ETJ-50-150	50	1.50	0,129	0,140
	4	50 ETJ-50-200	50	2.00	0,172	0,184



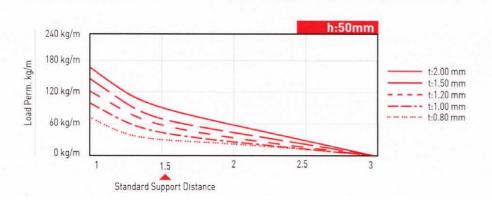
WTS 50

Separators	Order Code		Thickness	Weight*	Weight**
Maria Compression and the six		(mm)	(mm)	(Kg/m)	(Kg/m)
	ETS-50-080	50	0.80	0,410	0,470
	ETS-50-100	50	1.00	0,512	0,572
	ETS-50-120	50	1.20	0,613	0,679
BA.	ETS-50-150	50	1.50	0,767	0,832
50	ETS-50-200	50	2.00	1,022	1,092



WN50series 2+++4

Loading Diagram

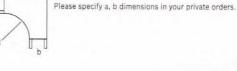




HB50series ≪



			-		
00° Horizontal Bends	Bends Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150HB	55	1.50	0,649	0,703
	ET-10050-150HB	105	1.50	0,884	0,958
	ET-15050-150HB	155	1.50	1,178	1,276
	ET-20050-150HB	205	1.50	1,532	1,661
	1.50 ET-25050-150HB	255	1.50	1,944	2,108
	ET-30050-200HB	305	2.00	2,891	3,110
	ET-40050-200HB	405	2.00	4,326	4,646
	ET-50050-200HB	505	2.00	6,074	6,518
and a second	2.00 ET-60050-200HB	605	2.00	8,136	8,724



HB50s



90° Horizontal Bends (R=300)	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150HB/300R	55	1.50	1,937	2,100
	ET-10050-150HB/300R	105	1.50	2,467	2,675
	ET-15050-150HB/300R	155	1.50	3,055	3,314
	ET-20050-150HB/300R	205	1.50	3,703	4,016
	1.50 ET-25050-150HB/300R	255	1.50	4,410	4,783
	ET-30050-200HB/300R	305	2.00	6,315	6,780
TO THE PARTY OF TH	ET-40050-200HB/300R	405	2.00	8,535	9,155
	ET-50050-200HB/300R	505	2.00	11,068	11,866
	2.00 ET-60050-200HB/300R	605	2.00	13,915	14,912



Please specify a, b dimensions in your private orders.





90° Horizontal Bends (R=600)	Order Code	Width	Thickness	Weight*	Weight**
COLUMN TO THE PARTY OF THE PARTY.		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150HB/600R	55	1.50	3,907	4,238
	ET-10050-150HB/600R	105	1.50	4,792	5,198
	ET-15050-150HB/600R	155	1.50	5,732	6,218
	ET-20050-150HB/600R	205	1.50	6,733	7,304
1000	1.50 ET-25050-150HB/600R	255	1.50	7,793	8,454
	ET-30050-200HB/600R	305	2.00	10,992	11,785
	ET-40050-200HB/600R	405	2.00	14,153	15,167
	ET-50050-200HB/600R	505	2.00	17,628	18,885
	2.00 ET-60050-200HB/600R	605	2.00	21,417	22,938

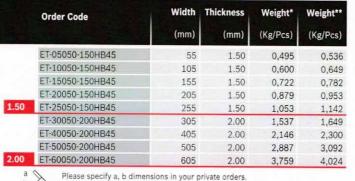


Please specify a, b dimensions in your private orders.



45° Horizontal Bends

GENERAL CATALOGUE 2013







5° Horizontal Bends (R=300)		Order Code	Width	Thickness	Weight*	Weight**
以后等并至这个正方面 是		1 TO 1 TO 1	(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	E	T-05050-150HB45/300R	55	1.50	0,974	1,056
	E	T-10050-150HB45/300R	105	1.50	1,193	1.294
	E	T-15050-150HB45/300R	155	1.50	1,437	1,558
	E	T-20050-150HB45/300R	205	1.50	1,705	1,849
	1.50 E	T-25050-150HB45/300R	255	1.50	1,997	2,165
	E	T-30050-200HB45/300R	305	2.00	2,754	2,958
CALLES .	E	T-40050-200HB45/300R	405	2.00	3,689	3,958
	E	T-50050-200HB45/300R	505	2.00	4,732	5,074
Cities	2.00 F	T-60050-200HB45/300B	605	2.00	5 915	6 338



Please specify a, b dimensions in your private orders. Özel siparişlerinizde a, b ölçülerini lütfen belirtiniz.

HB 50 SERIES

45° Horizontal Bends (R=600)	Order Code		Thickness	Weight*	Weight**
	《基础》	(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150HB45/600R	55	1.50	1,605	1,740
	ET-10050-150HB45/600R	105	1.50	1,973	2,139
	ET-15050-150HB45/600R	155	1.50	2,358	2,557
	ET-20050-150HB45/600R	205	1.50	2,773	3,007
	1.50 ET-25050-150HB45/600R	255	1.50	3,396	3,683
-	ET-30050-200HB45/600R	305	2.00	4,444	4,769
CHIEFE CO.	ET-40050-200HB45/600R	405	2.00	5,746	6,161
The state of the s	ET-50050-200HB45/600R	505	2.00	7,198	7,714
	2.00 ET-60050-200HB45/600R	605	2.00	8,759	9,382



Özel siparişlerinizde a, b ölçülerini lütfen belirtiniz.

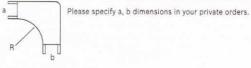


90° Horizontal Bends (R=600)





0° Horizontal Bends	al Bends Order Code			Weight*	Weight**
WENT THE THE STREET STREET		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150HB	55	1.50	0,649	0,703
	ET-10050-150HB	105	1.50	0,884	0,958
	ET-15050-150HB	155	1.50	1,178	1,276
	ET-20050-150HB	205	1.50	1,532	1,661
	1.50 ET-25050-150HB	255	1.50	1,944	2,108
	ET-30050-200HB	305	2.00	2,891	3,110
-	ET-40050-200HB	405	2.00	4,326	4,646
	ET-50050-200HB	505	2.00	6,074	6,518
CONT.	2.00 ET-60050-200HB	605	2.00	8,136	8,724







90° Horizontal Bends (R=300)	Order Code	Width	Thickness	Weight*	Weight**
AND REAL PROPERTY OF THE PERSON OF THE PERSO		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150HB/300R	55	1.50	1,937	2,100
	ET-10050-150HB/300R	105	1.50	2,467	2,675
	ET-15050-150HB/300R	155	1.50	3,055	3,314
	ET-20050-150HB/300R	205	1.50	3,703	4,016
4	1.50 ET-25050-150HB/300R	255	1.50	4,410	4,783
	ET-30050-200HB/300R	305	2.00	6,315	6,780
The state of the s	ET-40050-200HB/300R	405	2.00	8,535	9,155
	ET-50050-200HB/300R	505	2.00	11,068	11,866
	2.00 ET-60050-200HB/300R	605	2.00	13,915	14,912















ET-30050-200HT

ET-40050-200HT

ET-50050-200HT



2.00	ET-60050-200HT	605	2.00	8,370
a	C Please spec	ify a, b, c dimension	ns in your priv	ate orders.
R				
R.	U _b U			

305

405

505

2.00

2.00

2.00

3,147

4.574

6 215

HT50series

3,383

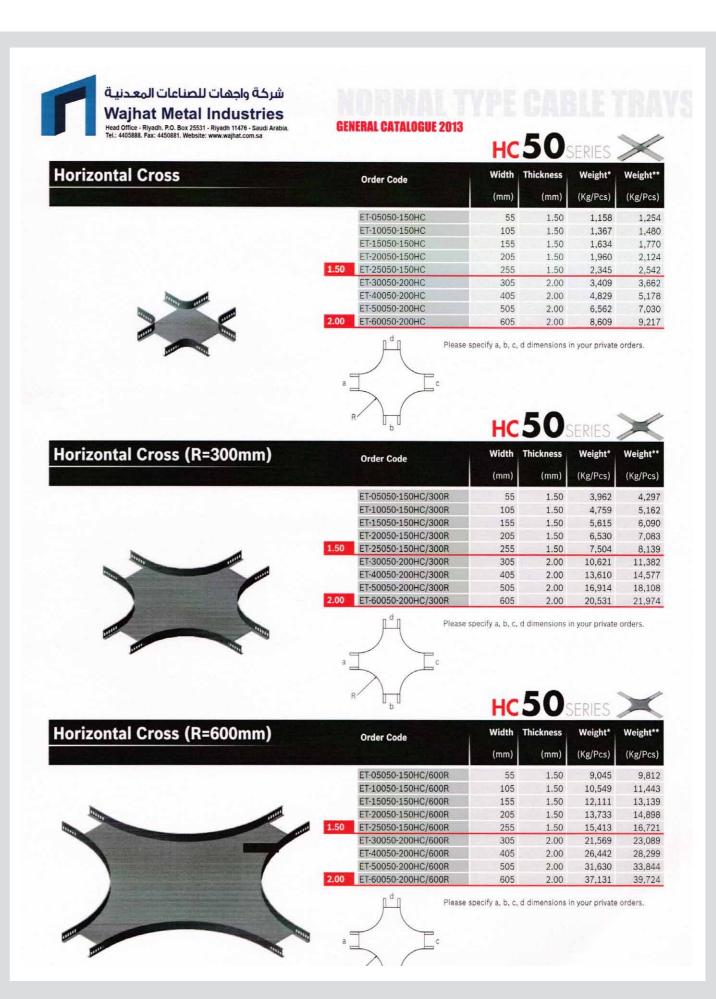
4,909

6,771

8,968

					TIGHTO,	
Horizontal Tees (R=300mm)	Order Code	Width	Thickness	Weight*	Meight** (Kg/Pcs) (Kg	
			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		ET-05050-150HT/300R	55	1.50	2,908	3,154
		ET-10050-150HT/300R	105	1.50	3,572	3,874
		ET-15050-150HT/300R	155	1.50	4,294	4,657
		ET-20050-150HT/300R	205	1.50	5,075	5,505
	1.50	ET-25050-150HT/300R	255	1.50	5,916	6,416
1111		ET-30050-200HT/300R	305	2.00	8,392	9,001
The state of the s		ET-40050-200HT/300R	405	2.00	10,996	11,787
		ET-50050-200HT/300R	505	2.00	13,914	14,907
	2.00	ET-60050-200HT/300R	605	2.00	17,147	18,363

			НТ	50	SERIES ,	1
Horizontal Tees (R=600mm)		Order Code	Width	Thickness	Weight*	Weight**
			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		ET-05050-150HT/600R	55	1.50	6,149	6,670
		ET-10050-150HT/600R	105	1.50	7,343	7,965
		ET-15050-150HT/600R	155	1.50	8,595	9,324
		ET-20050-150HT/600R	205	1.50	9,906	10,746
	1.50	ET-25050-150HT/600R	255	1.50	11,276	12,232
		ET-30050-200HT/600R	305	2.00	15,804	16,931
		ET-40050-200HT/600R	405	2.00	19,821	21,227
		ET-50050-200HT/600R	505	2.00	24,152	25,859
	2.00	ET-60050-200HT/600R	605	2.00	28,797	30,825





Tel.: 4405888. Fax: 4450881. Website: www.wajhat.com.sa			RC	50	SERIES	No.
Reducers (Center)	Order Co	ode	Width	Thickness	Weight*	Weight**
			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10050	-150RC	105	1.50	0,624	0,675
	ET-15050	-150RC	155	1.50	0,848	0,918
	ET-20050	-150RC	205	1.50	1,147	1,243
	1.50 ET-25050	-150RC	255	1.50	1,479	1,603
	ET-30050	-200RC	305	2.00	2,226	2,396
	ET-40050	-200RC	405	2.00	3,414	3,669
	FT-50050	-200RC	505	2.00	4 962	5 327

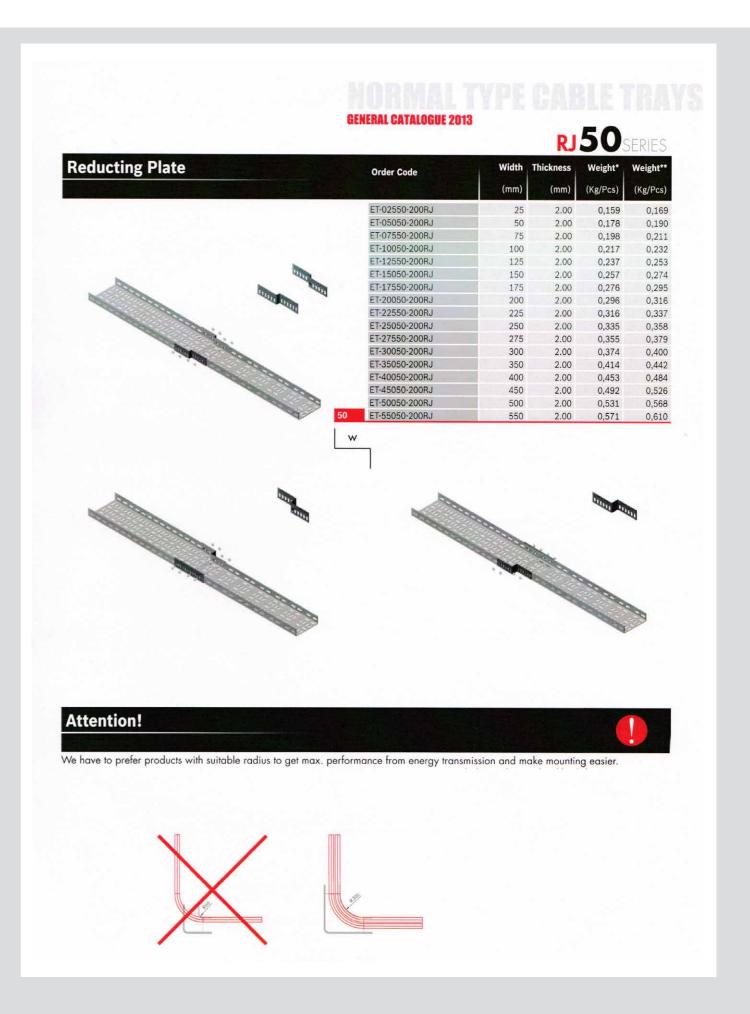
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2.00 6,827



		RR	50	SERIES	No.
Reducers (Right)	Order Code	Width	Thickness	Weight*	Weight**
THE RESERVE OF THE PARTY OF THE		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10050-150RR	105	1.50	0,624	0,676
	ET-15050-150RR	155	1.50	0,852	0,923
	ET-20050-150RR	205	1.50	1,134	1,229
	1.50 ET-25050-150RR	255	1.50	1,480	1,604
	ET-30050-200RR	305	2.00	2,226	2,396
	ET-40050-200RR	405	2.00	3,420	3,676
	ET-50050-200RR	505	2.00	4,967	5,332
	2.00 ET-60050-200RR	605	2.00	6,831	7,327

		RL	50	SERIES	No.
Reducers (Left)	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10050-150RL	105	1.50	0,624	0,676
	ET-15050-150RL	155	1.50	0,852	0,923
	ET-20050-150RL	205	1.50	1,134	1,229
	1.50 ET-25050-150RL	255	1.50	1,480	1,604
	ET-30050-200RL	305	2.00	2,226	2,396
	ET-40050-200RL	405	2.00	3,420	3,676
	ET-50050-200RL	505	2.00	4,967	5,332
	2.00 ET-60050-200RL	605	2.00	6,831	7,327





Adjustable Internal Risers

IR50series

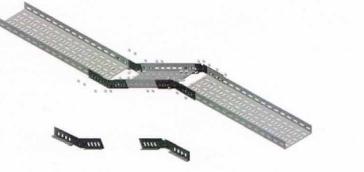
				-	
	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	EN-05050-150IR	50	1.50	1,331	1,452
	EN-10050-150IR	100	1.50	1,793	1,956
	EN-15050-150IR	150	1.50	2,257	2,462
	EN-20050-150IR	200	1.50	2,331	2,543
1.50	EN-25050-150IR	250	1.50	3,115	3,398
	EN-30050-200IR	300	2.00	4,987	5,328
	EN-40050-200IR	400	2.00	6,398	6,835
	EN-50050-200IR	500	2.00	7,611	8,131
2.00	EN-60050-200IR	600	2.00	9,023	9,639

E	\wedge
	USFRIES
	OLIVILO

djustable External Risers		Order Code	Width	Thickness	Weight*	Weight**
THE PERSON OF THE PERSON OF			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		EN-05050-150ER	50	1.50	1,393	1,511
		EN-10050-150ER	100	1.50	1,855	2,013
		EN-15050-150ER	150	1.50	2,319	2,516
		EN-20050-150ER	200	1.50	2,393	2,596
	1.50	EN-25050-150ER	250	1.50	3,177	3,447
		EN-30050-200ER	300	2.00	5,070	5,416
		EN-40050-200ER	400	2.00	6,481	6,924
TE TEN		EN-50050-200ER	500	2.00	7,694	8,219
	2.00	EN-60050-200ER	600	2.00	9,106	9,728

- FA	V
ICOU	SERIES
	OLKILO

Level Changing Parts	Order Code	Width (mm)	Thickness (mm)	Weight* (Kg/Set)	Weight** (Kg/Set)
	2.00 ETLC-50-200	50	2.00	0,357	0,381



NORMAL TYPE CABLE TRAYS

GENERAL CATALOGUE 2013

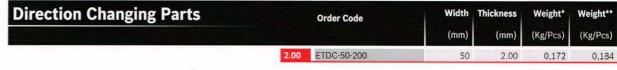
VT50series

				or here I to I have here.	
Vertical Tees	Order Code	Width	Thickness	Weight*	Weight**
STATE OF THE PARTY.		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150VT	55	1.50	0,851	0,912
	ET-10050-150VT	105	1.50	1,498	1,625
	ET-15050-150VT	155	1.50	2,437	2,644
	ET-20050-150VT	205	1.50	3,361	3,646
	1.50 ET-25050-150VT	255	1.50	4,678	5,075
	ET-30050-200VT	305	2.00	7,692	8,217
	ET-40050-200VT	405	2.00	12,109	12,935
	ET-50050-200VT	505	2.00	17,377	18,562
	2.00 ET-60050-200VT	605	2.00	22,991	24,559

EP50series

End Parts	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-05050-150EP	55	1.50	0,136	0,147
	ET-10050-150EP	105	1.50	0,165	0,179
	ET-15050-150EP	155	1.50	0,195	0,211
	ET-20050-150EP	205	1.50	0,224	0,243
A	1.50 ET-25050-150EP	255	1.50	0,254	0,275
00	ET-30050-200EP	305	2.00	0,378	0,403
B	ET-40050-200EP	405	2.00	0,456	0,487
	ET-50050-200EP	505	2.00	0,535	0,571
	2.00 ET-60050-200EP	605	2.00	0,613	0,655

DC50SERIE



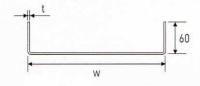




EN60series

nal Type Cable Trays	Order Code	Width	Thickness	Weight*	Weight**
AND THE PROPERTY OF THE		(mm)	(mm)	(Kg/m)	(Kg/m)
	EN-10060-080	100	0.80	1,166	1,339
	EN-10060-100	100	1.00	1,451	1,622
	EN-10060-120	100	1.20	1,731	1,915
	EN-10060-150	100	1.50	2,161	2,344
	100 EN-10060-200	100	2.00	2,853	3,048
	EN-15060-080	150	0.80	1,412	1,621
	EN-15060-100	150	1.00	1,757	1,965
	EN-15060-120	150	1.20	2,100	2,323
	EN-15060-150	150	1.50	2,625	2,847
	150 EN-15060-200	150	2.00	3,467	3,704
	EN-20060-080	200	0.80	1,667	1,914
	EN-20060-100	200	1.00	2,077	2,322
	EN-20060-120	200	1.20	2,483	2,746
	EN-20060-150	200	1.50	3,103	3,367
	200 EN-20060-200	200	2.00	4,105	4,385
	EN-25060-100	250	1.00	2,264	2,532
	EN-25060-120	250	1.20	2,708	2,995
The state of the s	EN-25060-150	250	1.50	3,384	3,671
	250 EN-25060-200	250	2.00	4,480	4,786
	EN-30060-100	300	1.00	2,763	3,089
	EN-30060-120	300	1.20	3,306	3,657
	EN-30060-150	300	1.50	4,162	4,515
	300 EN-30060-200	300	2.00	5,477	5,851
-	EN-40060-120	400	1.20	4,152	4,593
11	EN-40060-150	400	1.50	5,190	5,631
	400 EN-40060-200	400	2.00	6,888	7,358
~ / /	EN-50060-120	500	1.20	4,880	5,398
	EN-50060-150	500	1.50	6,100	6,618
	500 EN-50060-200	500	2.00	8,101	8,654
	EN-60060-120	600	1.20	5,727	6,335
	EN-60060-150	600	1.50	7,158	7,766
	600 EN-60060-200	600	2.00	9,513	10,162

Weight* This weight is unit weight of Pregalvanized products. Weight* This weight is unit weight of Hot-dip galvanization coated products.

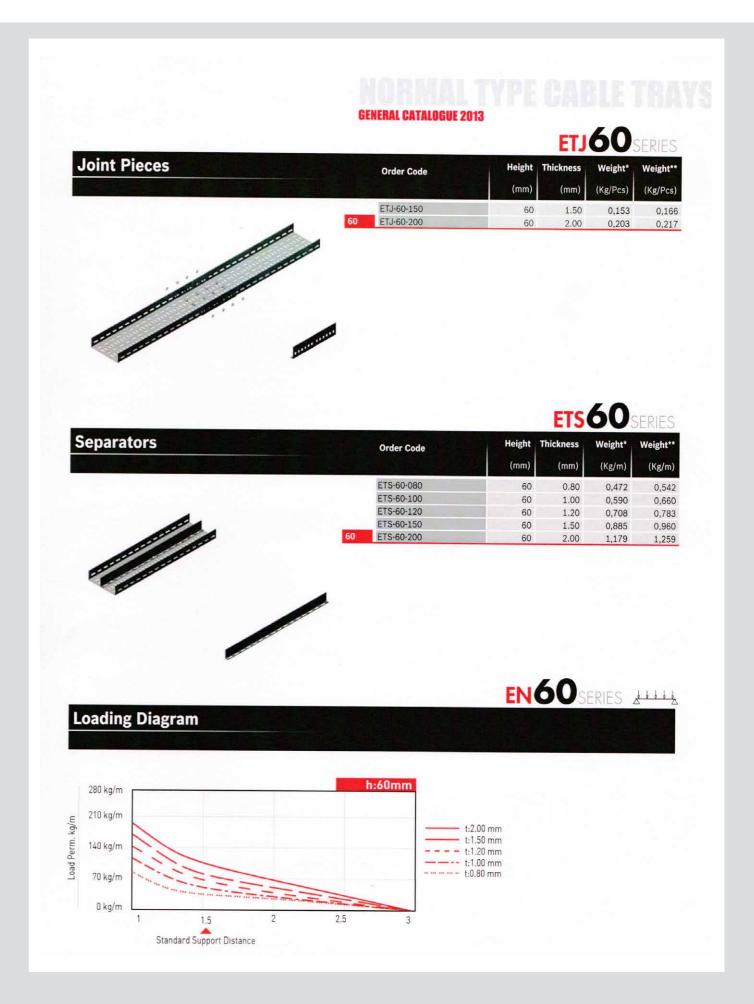




Coating Type
P/HD/SP/E
Pregalvanized

Elektrostatic Paint

2500/3000 mm







0° Horizontal Bends	Order Code	Width	Thickness	Weight*	Weight**
THE RESERVE TO SERVE THE		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10060-150HB	105	1.50	0,978	1,060
	ET-15060-150HB	155	1.50	1,283	1,391
	ET-20060-150HB	205	1.50	1,649	1,788
	1.50 ET-25060-150HB	255	1.50	2,073	2,248
	ET-30060-200HB	305	2.00	3,032	3,263
	ET-40060-200HB	405	2.00	4,490	4,825
	ET-50060-200HB	505	2.00	6,262	6,722
	2.00 ET 60060 200HB	COE	2.00	0.247	0.055



Please specify a, b dimensions in your private orders.



90° Horizontal Bends (R=300)		Order Code	Width	Thickness	Weight*	Weight**
W. T. P. S. T. A. W. S. T. D. V. S. T. S. S.			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		ET-10060-150HB/300R	105	1.50	2,666	2,891
		ET-15060-150HB/300R	155	1.50	3,266	3,542
		ET-20060-150HB/300R	205	1.50	3,926	4,258
	1.50	ET-25060-150HB/300R	255	1.50	4,644	5,037
		ET-30060-200HB/300R	305	2.00	6,561	7,047
The state of the s		ET-40060-200HB/300R	405	2.00	8,804	9,448
		ET-50060-200HB/300R	505	2.00	11,361	12,185
	2.00	ET-60060-200HB/300R	605	2.00	14,232	15,256



Please specify a, b dimensions in your private orders.

HB60series

90° Horizontal Bends (R=600)	Order Code	Width	Thickness	Weight*	Weight**
STATE OF THE PARTY		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10060-150HB/600R	105	1.50	5,117	5,551
	ET-15060-150HB/600R	155	1.50	6,069	6,583
	ET-20060-150HB/600R	205	1.50	7,082	7,682
THE	1.50 ET-25060-150HB/600R	255	1.50	8,153	8,844
	ET-30060-200HB/600R	305	2.00	11,364	12,188
	ET-40060-200HB/600R	405	2.00	14,549	15,597
	ET-50060-200HB/600R	505	2.00	18,047	19,341
All Hard Control	2.00 FT-60060-200HB/600B	605	2.00	21.860	23 420

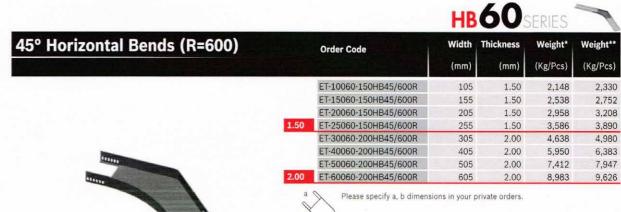


1	Please specify a, b dimensions in your private orders

		НВ	60	SERIES	7
45° Horizontal Bends	Order Code	Width	Thickness	Weight*	Weight**
A STATE OF STREET STREET		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-10060-150HB45	105	1.50	0,672	0,728
	ET-15060-150HB45	155	1.50	0,800	0,866
	ET-20060-150HB45	205	1.50	0,962	1,042
	1.50 ET-25060-150HB45	255	1.50	1,141	1,236
	ET-30060-200HB45	305	2.00	1,640	1,760
	ET-40060-200HB45	405	2.00	2,258	2,421
	ET-50060-200HB45	505	2.00	3,009	3,224
DAZZE	2.00 ET-60060-200HB45	605	2.00	3,891	4,167

		НВ	60	SERIES	7
45° Horizontal Bends (R=300)	Order Code	Width (mm)	Thickness (mm)	Weight* (Kg/Pcs)	Weight** (Kg/Pcs)
	ET-10060-150HB45/300R	105	1.50	1,312	1,422
	ET-15060-150HB45/300R	155	1.50	1,561	1,692
	ET-20060-150HB45/300R	205	1.50	1,834	1,988
	1.50 ET-25060-150HB45/300R	255	1.50	2,130	2,309
	ET-30060-200HB45/300R	305	2.00	2,892	3,108
	ET-40060-200HB45/300R	405	2.00	3,837	4,119
*****	ET-50060-200HB45/300R	505	2.00	4,890	5,244
	2.00 ET-60060-200HB45/300R	605	2.00	6,082	6,519

Please specify a, b dimensions in your private orders.









1.50 ET-25060-150HT

ET-30060-200HT

ET-40060-200HT

ET-50060-200HT



2.00	E1-60060-200H		603	2.00	0,040
a	C	Please specify a,	b, c dimension	s in your priv	ate orders.
R					

1.50

2.00

2.00

2.00

LITAD

305

405

505

C Please specify a, b, c dimensions in your private orders.

2,283

3,290

4,729

6,481

2,475

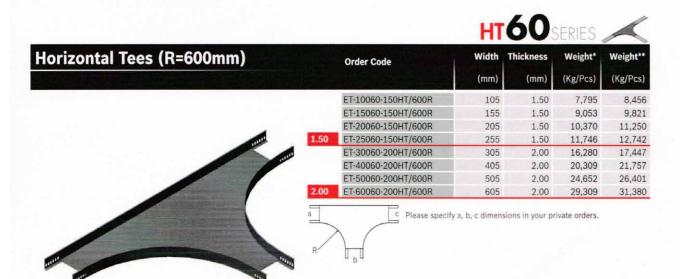
3,538

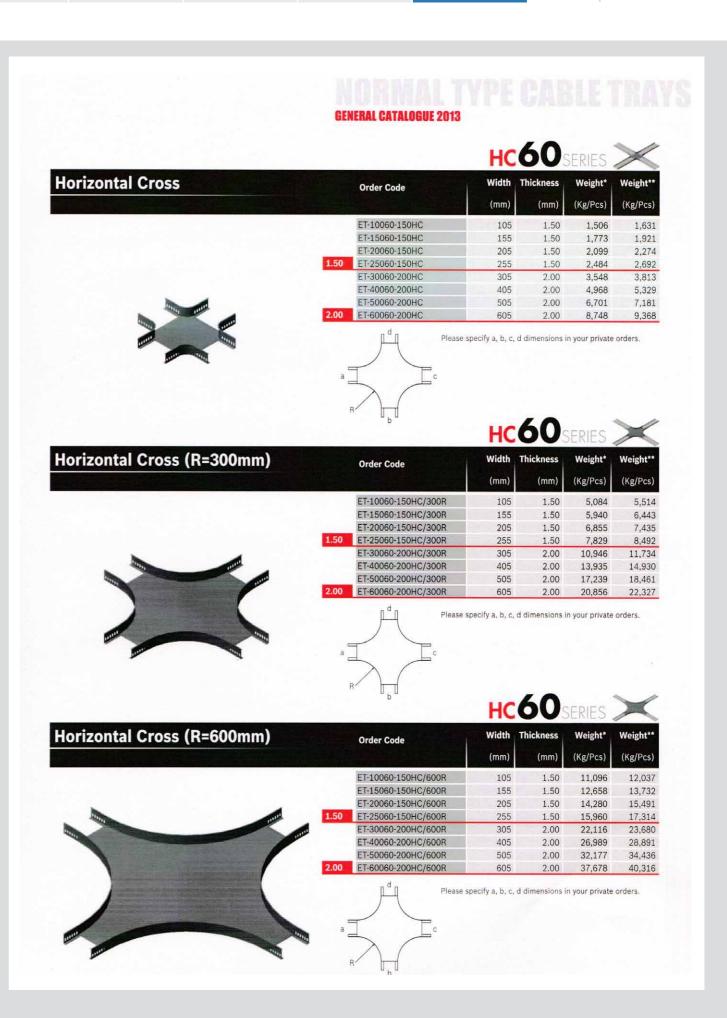
5,078

6,952

9,162

			П	UU	DERIES .	
Horizontal Tees (R=300mm)		Order Code	Width	Thickness	Weight*	Weight**
THE REPORT OF THE PARTY OF THE			(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
		ET-10060-150HT/300R	105	1.50	3,843	4,167
		ET-15060-150HT/300R	155	1.50	4,571	4,957
		ET-20060-150HT/300R	205	1.50	5,358	5,811
	1.50	ET-25060-150HT/300R	255	1.50	6,204	6,729
		ET-30060-200HT/300R	305	2.00	8,686	9,321
THE STATE OF THE S		ET-40060-200HT/300R	405	2.00	11,302	12,120
		ET-50060-200HT/300R	505	2.00	14,232	15,253
	2.00	ET-60060-200HT/300R	605	2.00	17,476	18,722





Reducting Plate



Weight* Order Code ET-15060-150RC 155 1.50 0,936 1,014 ET-20060-150RC 205 1.50 1,248 1,352 1.50 ET-25060-150RC 255 1.50 1,590 1,724 ET-30060-200RC 305 2.00 2,349 2,530 405 3,830 ET-40060-200RC 2.00 3,562 ET-50060-200RC 505 2.00 5,133 5,513 2.00 ET-60060-200RC 605 2.00 7,021 7,534

RC60



Please specify a, b dimensions in your private orders.

RR60 SERIES

Reducers (Right)	Order Code	Width	Thickness	Weight*	Weight**
		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-15060-150RR	155	1.50	0,941	1,019
	ET-20060-150RR	205	1.50	1,233	1,336
	1.50 ET-25060-150RR	255	1.50	1,592	1,726
	ET-30060-200RR	305	2.00	2,350	2,531
	ET-40060-200RR	405	2.00	3,569	3,838
	ET-50060-200RR	505	2.00	5,139	5,520
	2.00 ET-60060-200RR	605	2.00	7,026	7,539
	2.00 ET-60060-200RR	605	2.00	7,026	7



a Please specify a, b dimensions in your private orders.

RL60serii

		KL	OUS	ERIES	
Reducers (Left)	Order Code	Width	Thickness	Weight*	Weight**
PERSONAL PROPERTY AND THE RESERVE		(mm)	(mm)	(Kg/Pcs)	(Kg/Pcs)
	ET-15060-150RL	155	1.50	0,941	1,019
	ET-20060-150RL	205	1.50	1,233	1,336
	1.50 ET-25060-150RL	255	1.50	1,592	1,726
	ET-30060-200RL	305	2.00	2,350	2,531
	ET-40060-200RL	405	2.00	3,569	3,838
	ET-50060-200RL	505	2.00	5,139	5,520
	2.00 ET-60060-200RL	605	2.00	7,026	7,539

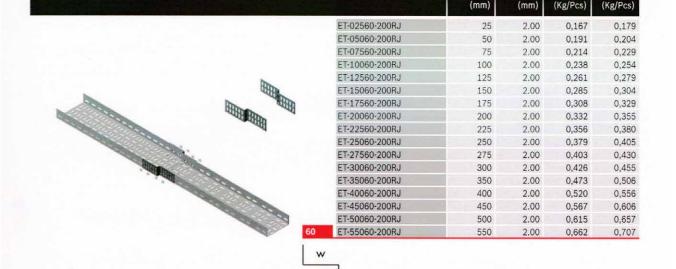
NORMAL TYPE CABLE TRAY

Width Thickness

GENERAL CATALOGUE 2013

Order Code

RJ60series



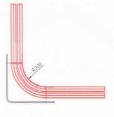


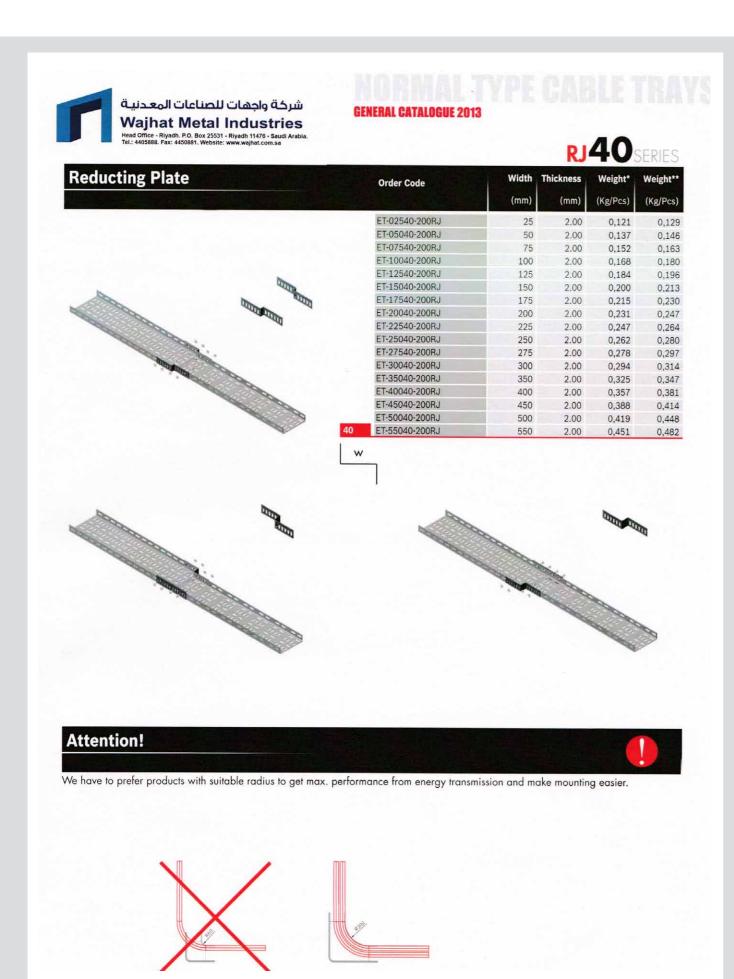
Attention!

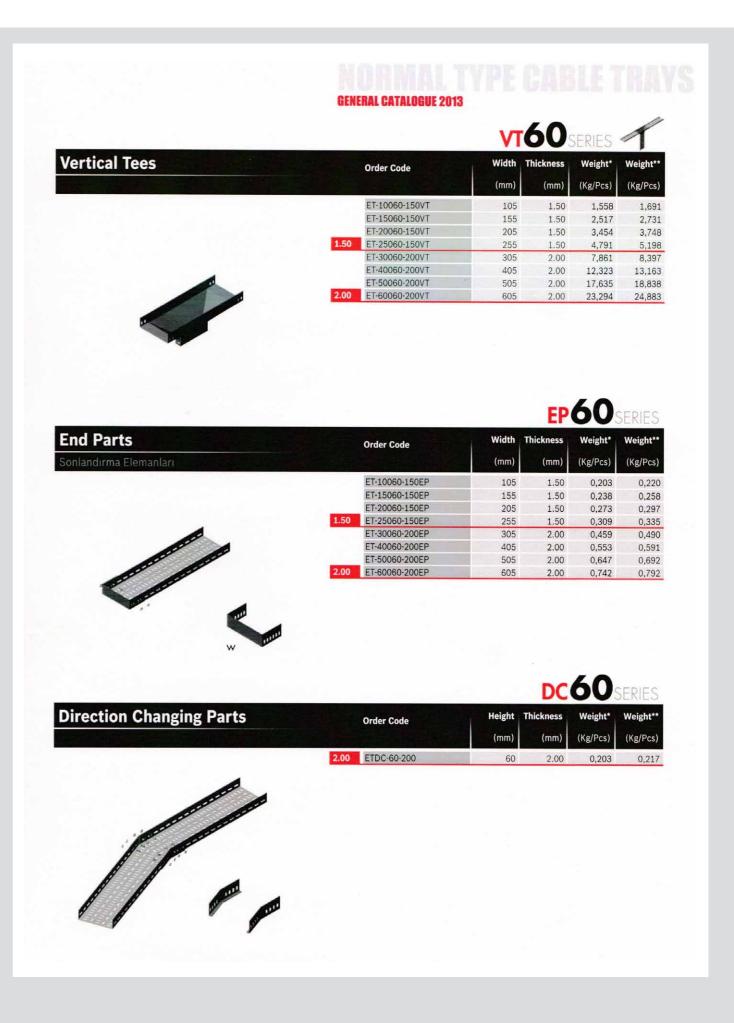


We have to prefer products with suitable radius to get max. performance from energy transmission and make mounting easier.

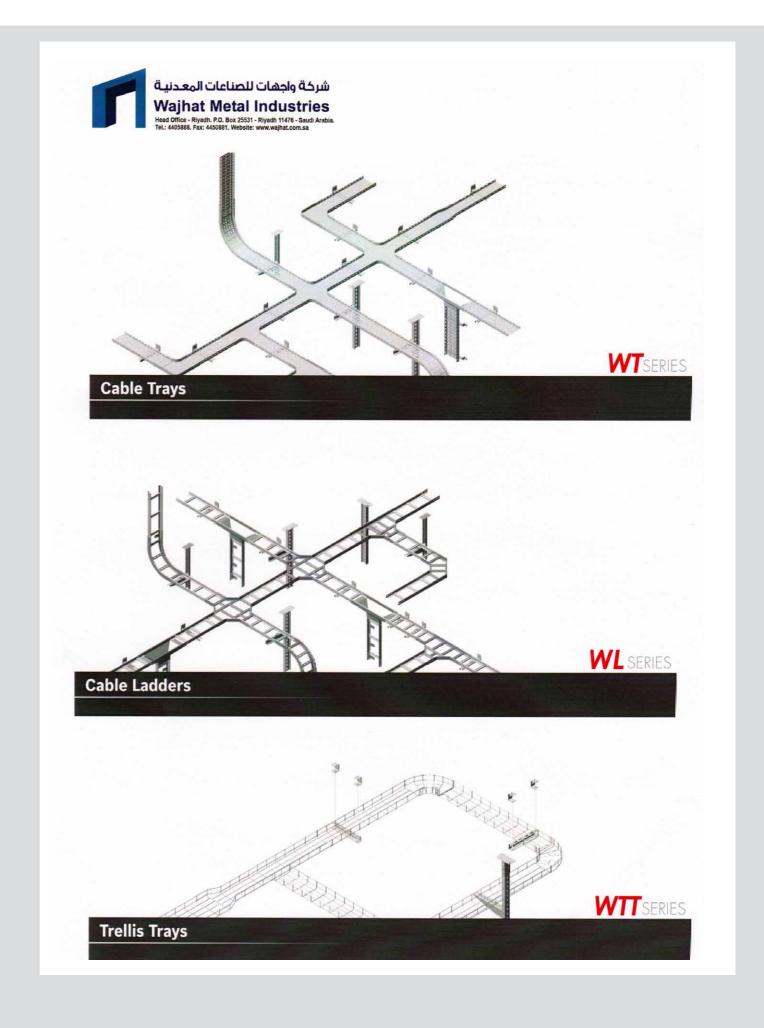


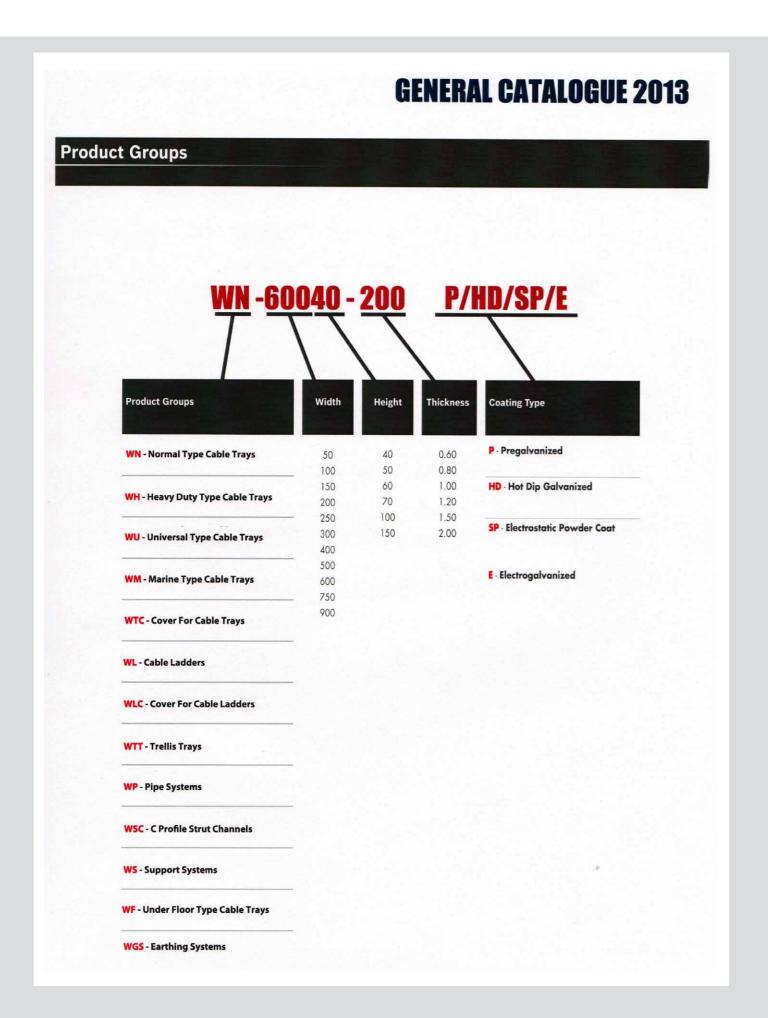


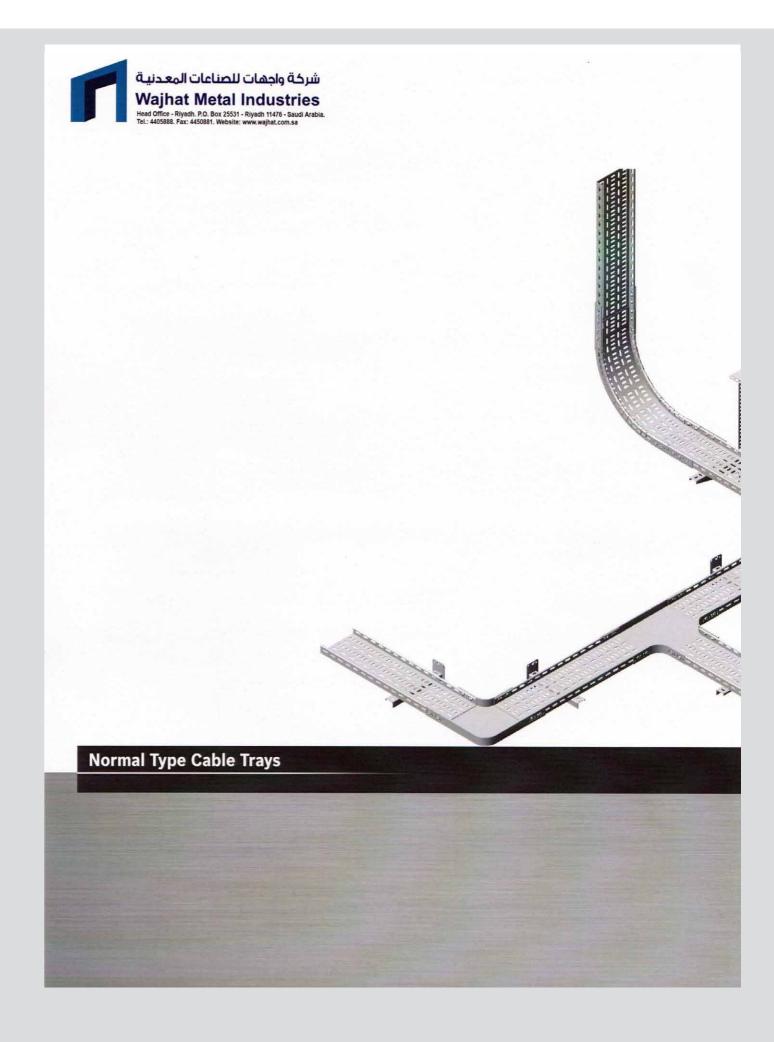


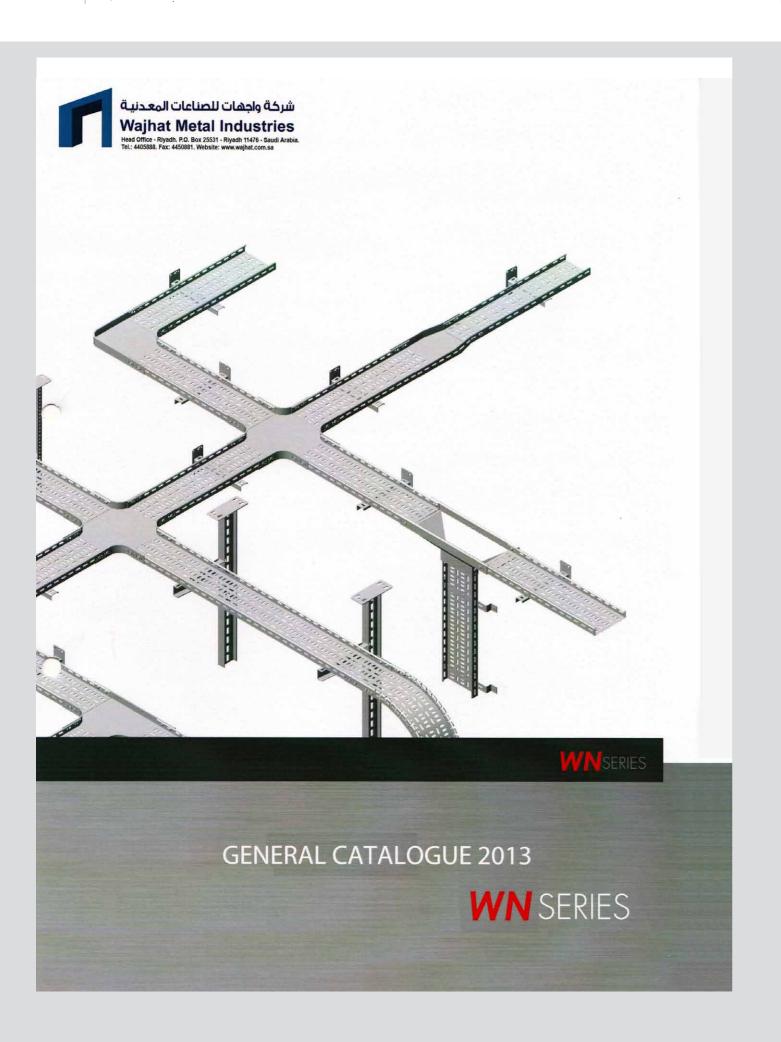


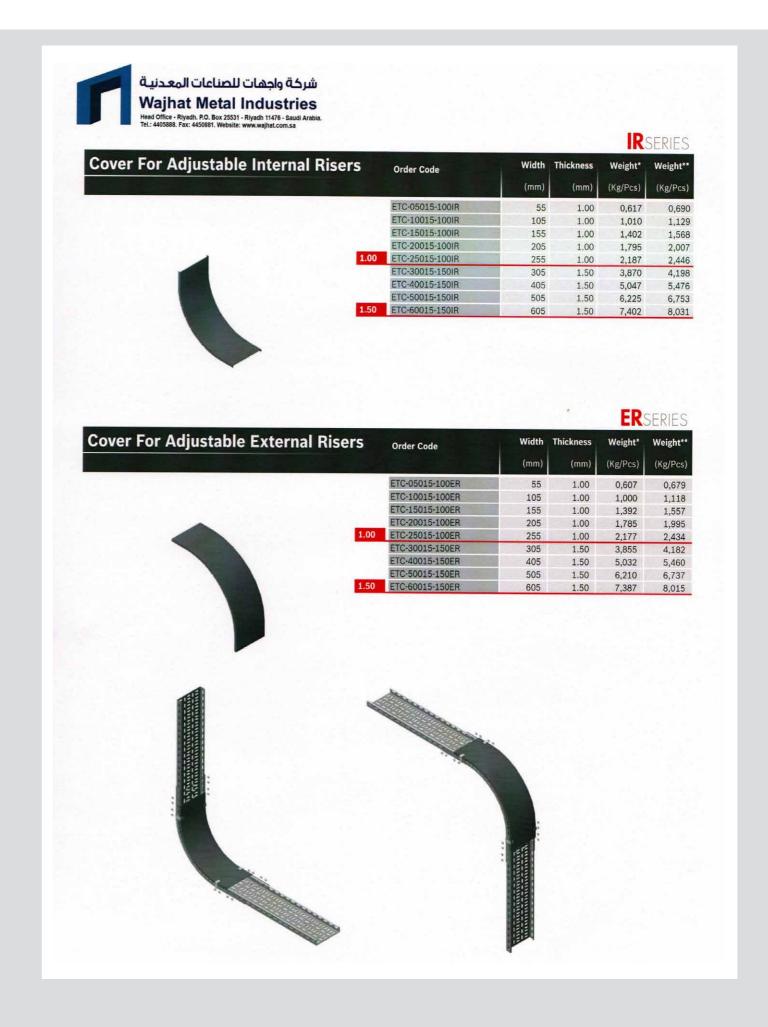








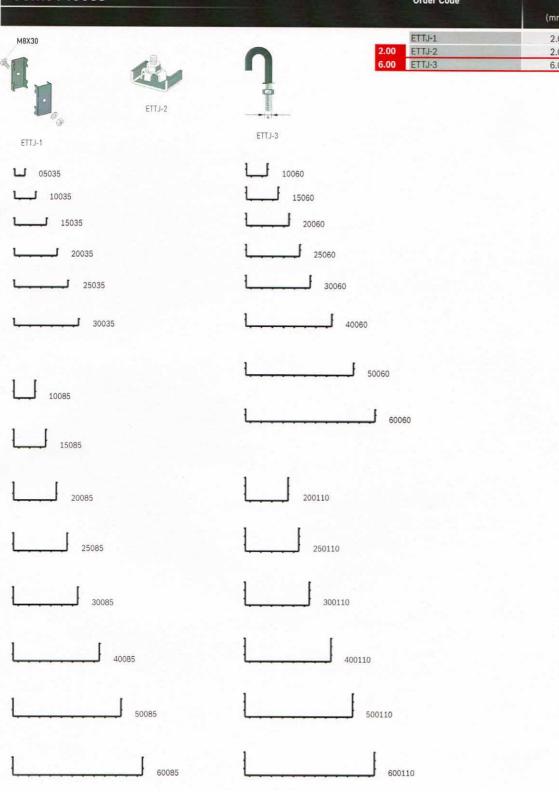




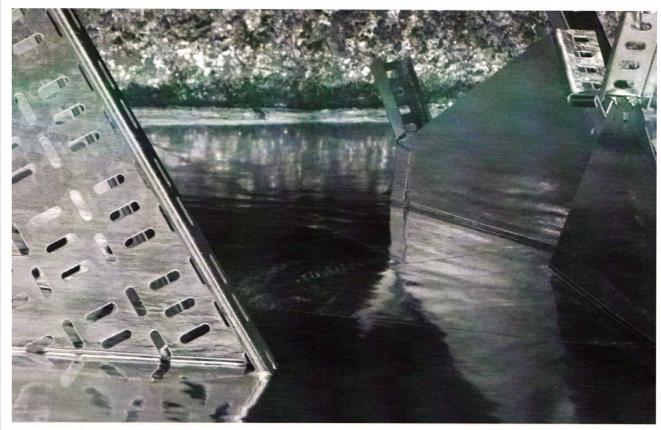


Joint Pieces		Order Code	Thickness	Weight**
			(mm)	(Kg/Pcs)
M8X30		ETTJ-1	2.00	0,060
		2.00 ETTJ-2	2.00	0,030
		6.00 ETTU-3	6.00	0,020

WNSEDIES







COATING PROCESSES

We use 4 different coating methods in cable carrier systems.

Pre-Galvanization

Pre-galvanized steels which are ready, hot dip galvanized with weight of coating 200 gr/m², are taken to the production line directly and turned to final products. Pre-galvanized products have an average coating thickness around 20-22 micron and these products are more suitable for using in indoor areas.

Electro Pre-Galvanization

This kind of coating is made by coating steel sheets about 10-15 micron of zinc with electrolysis method after all production processes, which is mostly prefered in indoor areas away from moisture to secure protection against corrosion.

Electrostatics Powder Paint

This kind of coating is made by securing chemical adhesion reaction at 250 $^{\circ}$ C with oven method, which is mostly used in decorative areas. Presenting alternative solutions to the customer with the wide variety of color options.

Hot Dip Galvanization Coating

The rationalist and certain solution for protecting iron and steel against corrosion is coating the product with hot dip galvanization method. Iron and steel products will be oxidized within the time by being influenced

for staying in atmospheric areas. The corrosion which is happened due to the oxidation, is not only the defect on the image but also a chemical reaction that is being the reason of effecting the chemical and mechanical properties of the metal and making the metal lose its all properties within time. Corrosion products which are named as rust also, effect the elements around oxidized metal as corrosion will effect to a place 30 times bigger than the starting point of the oxidation. We use metal surface protection methods to keep the metal away from outer oxidation

Hot dip galvanization coating is the most trustworthy and longevous one between all these protection methods.

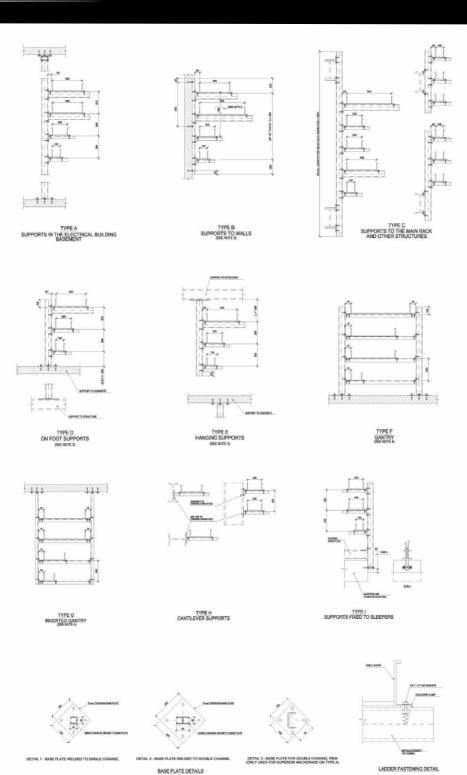
Hot dip galvanization coating is made by dipping iron and steel products in to the liquid zinc pools at 450 °C. Galvanization coating; is became by chemical reaction happened on the surface of the material after the diffusion of iron (Fe) and zinc (Zn) atoms. The material should be skinpassed and oil, rust and grease should be cleaned from the surface of the material, before starting to coating process. After the cleaning of the surface, the material will be dried and will be ready for galvanization coating process. The design criticals are as important as surface cleaning of the material in hot dip galvanization method. Base criticals are air, drainage and brace holes in production with suitable dimensions for zinc pool, especially in closed mass production.

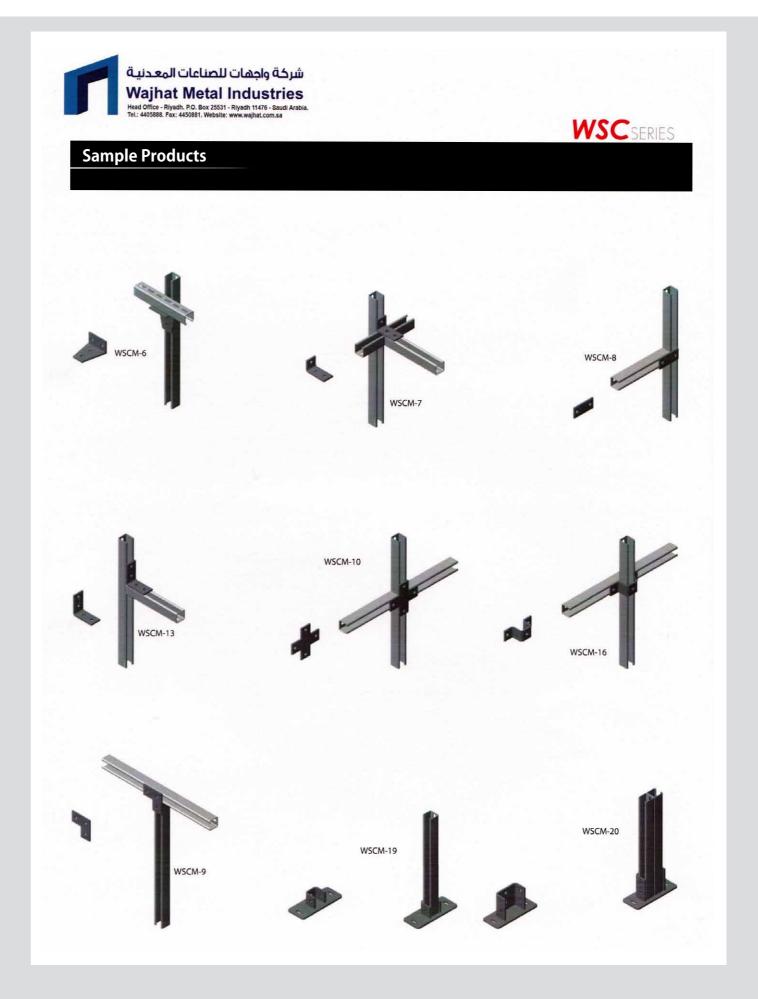
The advantages of Hot Dip Galvanization Method will be counted as below; Forming a thick and homogenous surface film, all critical points (iner mass, sharp corners, cut sides, hole surfaces, blanks, etc.) will be protected. The surfaces which are coated with other methods.





Sample Products





CABLE TRAY ACCESSORIES

CABLE SEPARATORS

- STANDARD MATERIALS : ROLLED FOR GENERAL STRUCTURE
- (JIS G310, SS400)
 STANDARD FINISHES: HOT DIP GALVANIZED

STRAIGHT SEPARATOR



SEPARATOR FOR HORIZONTAL ELBOW

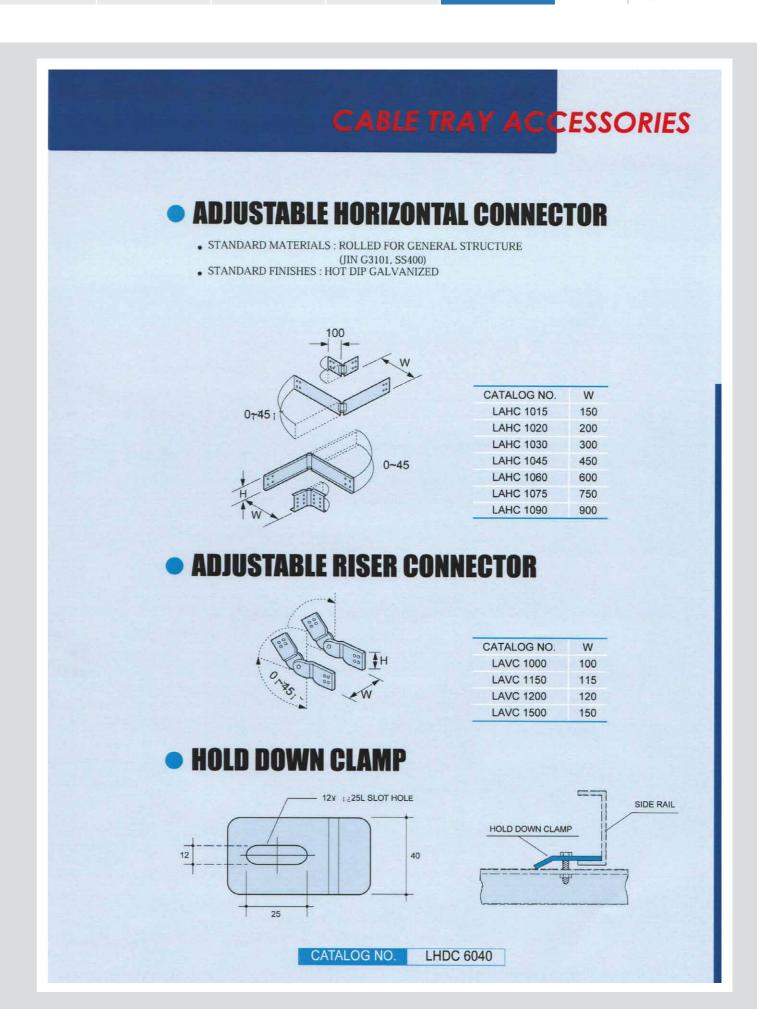
					UNIT :mm
CATALOG	TRAY		CABLEDUCT		
NO	DEPTH (H)	SIDE	DEPH (H)	SIDE RAIL	LENGTH
CTSP-10	65	100	-	-	3000
CTSP-15	115	150			3000
CTSP-20	165	200	-	-	3000
CTSP-10	-	-	85	100	3000
CTSP-15			35	150	3000
CTSP-20	-	-	185	200	3000

					UNIT:mm
CATALOO	TRAY		CABLE	DUCT	
NO NO	DEPTH (H)	SIDE	DEPH (H)	SIDE	LENGTH
TSPHE-10	65	100		-	3000
CTSPHE-15	115	150			3000
TSPHE-20	165	200		1141	3000
CTSPHE-10	-		85	100	3000
CTSPHE-15	-		35	150	3000
CTSPHE-20	-	-	185	200	3000

SEPARATOR FOR VERTICAL ELBOW

					1	UNIT :mm
		TRAY		CABLE	DUCT	
CATALOG NO		DEPTH (H)	SIDE	DEPH (H)	SIDE	LENGTH
CTSPVEI-10	CTSPVEO-10	65	100	•		300 300 300
CTSPVEI-15	CTSPVEO-15	115	150	*	·	300 300 300
CTSPVEI-20	CTSPVEO-20	165	200	-		300 300 300
CTSPVEI-10	CTSPVEO-10	-	÷	85	100	300 300 300
CTSPVEI-15	CTSPVEO-15			35	150	300 300 300
CTSPVEI-20	CTSPVEO-20	-	-	185	200	300 300 300

SEPARATOR CLAMP



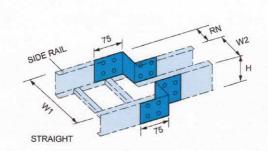
Wajhat Metal Industries Pre-Qualification Documents

CABLE TRAY ACCESSORIES

STRAIGHT REDUCING CONNECTOR

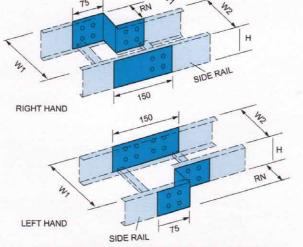
• STANDARD MATERIALS : ROLLED FOR GENERAL STRUCTURE

(JIN G301,SS400)
• STANDARD FINISHES : HOT DIP GALVANIZED



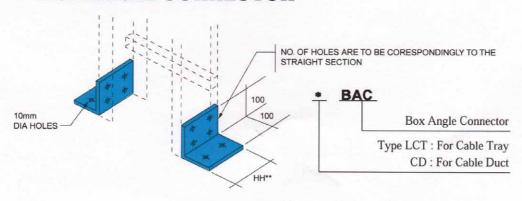
	(Unit:mm)
CATALOG NO.	W
LARC 0250	25
LARC 0500	50
LARC 0750	75
LARC 1500	150
LARC 2000	200
LARC 2250	225
LARC 2750	275
LARC 3000	300
LARC 3500	350
LARC 3750	375

OFFSET REDUCING CONNECTIOR



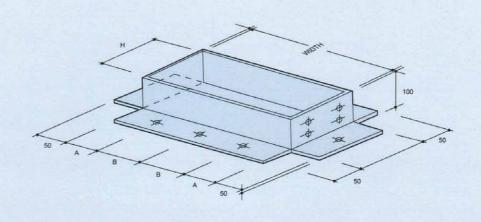
	(Unit:mm)		
CATALOG NO.	W		
LAOR 0500	50		
LAOR 1000	100		
LAOR 1500	150		
LAOR 3000	300		
LAOR 4000	400		
LAOR 4500	450		
LAOR 5500	550		
LAOR 6000	600		
LAOR 7000	700		
LAOR 7500	750		

BOX ANGLE CONNECTOR



CABLE TRAY ACCESSORIES

BOX CONNECTOR



				(Unit:mm)
CATALOG NO	WIDTH	TRAY WIDTH	Α	В
*-BXC-150	152	150		1000
*-BXC-200	202	200		100
*-BXC-300	302	300		150
*-BXC-450	452	450		200
*-BXC-600	602	600	200	100
*-BXC-750	752	750	175	200
*-BXC-900	902	900	150	200
*-BXC-1000	1002	1000	200	200

* TYPE C LCT : For Cable Tray

YOUNG JEON INDUSTRIAL CO., LTD.

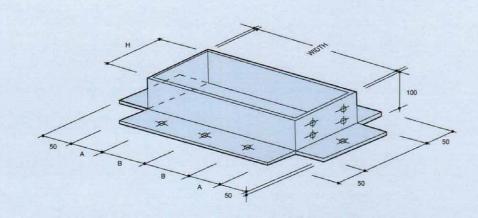
144

Wajhat Metal Industries
Pre-Qualification Documents

Gonoral



BOX CONNECTOR



				(Unit:mm)
CATALOG NO	WIDTH	TRAY WIDTH	Α	В
*-BXC-150	152	150		
*-BXC-200	202	200		
*-BXC-300	302	300		150
*-BXC-450	452	450		200
*-BXC-600	602	600	200	100
*-BXC-750	752	750	175	200
*-BXC-900	902	900	150	200
*-BXC-1000	1002	1000	200	200

* TYPE C LCT : For Cable Tray



CABLE TRAY ACCESSORIES

CATALOG NO.

LBEP 1501

LBEP 2030

LBEP 3003

LBEP 4504

LBEP 6005

LBEP 7506

LBEP 9007

CATALOG NO.

LEDO 1555

LEDO 2055

LEDO 3055

LEDO 4555

LEDO 6055

LEDO 7555

LEDO 9055

LEDO 3031

LEDO 4531

LEDO 6031

W

150

200

300

450

600

750

900

WAR

300 50 50

450 50 50

600 50 50

750 50 50

900 50 50

300 38 125

450 38 125

600 38 125

LEDO 1531 150 38 125

LEDO 7531 750 38 125 LEDO 9031 900 38 125

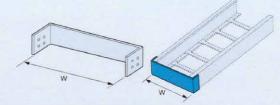
50

150 50

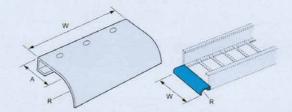
200 50

BLIND END PLATES (STEEL)

- STANDARD MATERIALS : ROLLED FOR GENERAL
- STRUCTURE(JIS G3101, SS400)
- STANDARD FINISHES : HOT DIP GALVANIZED



• END DROPOUT (STEEL)



SHANK BOLT & NUT(STEEL)

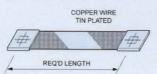
- STANDARD MATERIALS : CARBON STEEL
- STANDARD FINISHES: ELECTRO GALVANIZED
- ORTIONS: STAINLESS STEEL (SS304, SS316)





CATALOG NO.	SIZE
SBN 0612	M 6*12L
SBN 0615	M 6*15L
SBN 0816	M 6*16L
SBN 1016	M 10*16L
SBN 1019	M 10*19L
SBN 9519	3/8"-16UNC

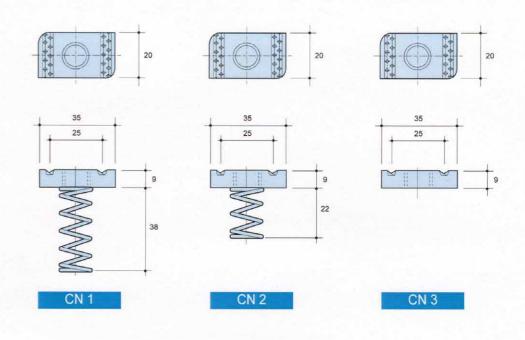
GROUNDING BONDING JUMPER



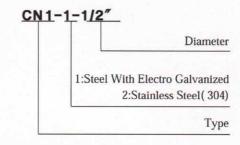
CATALOG NO.	CONDUCTOR	
GBJ 08	8mm2	
GBJ 14	14mm2	
GBJ 22	22mm2	
GBJ 30	30mm2	
GBJ 38	38mm2	
GBJ 50	50mm2	
GBJ 60	60mm2	
GBJ 80	80mm2	
GBJ 100	100mm2	
GBJ 125	125mm2	
GBJ 150	150mm2	

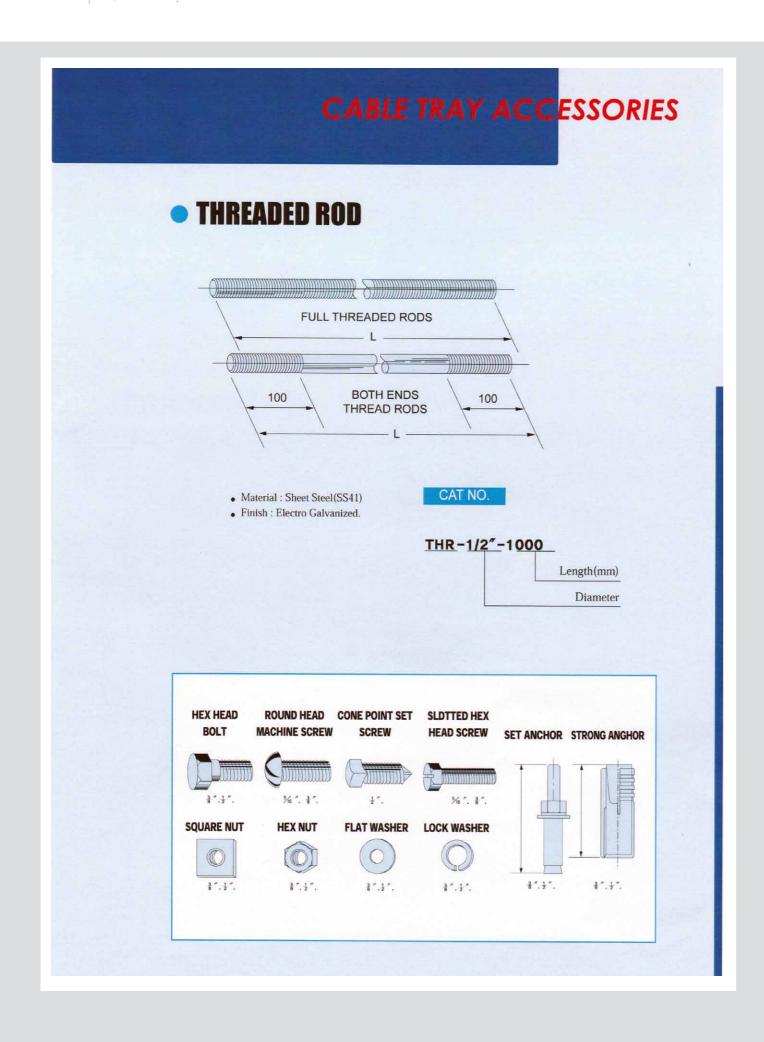


CHANNEL SPRING NUT



CAT NO.

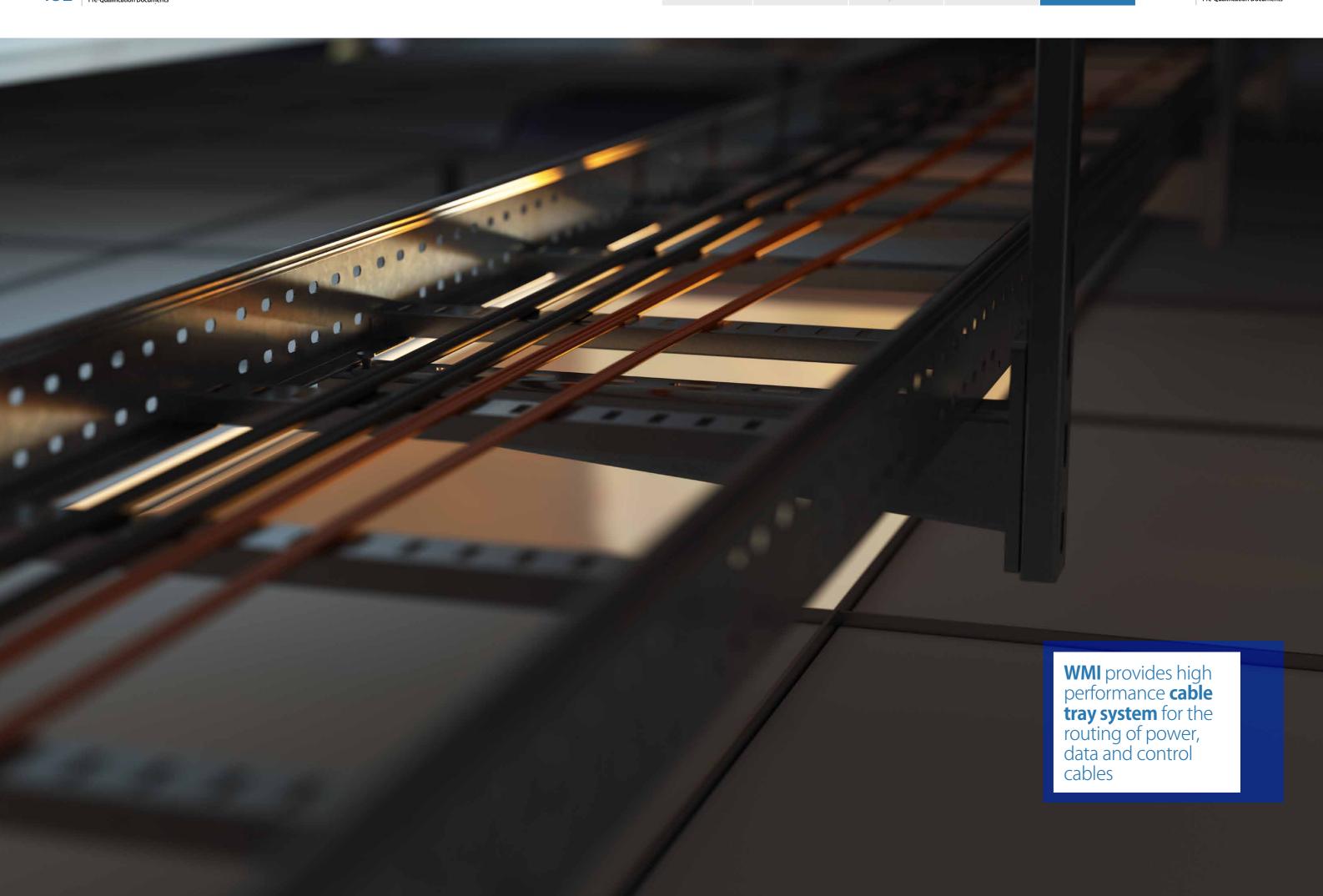






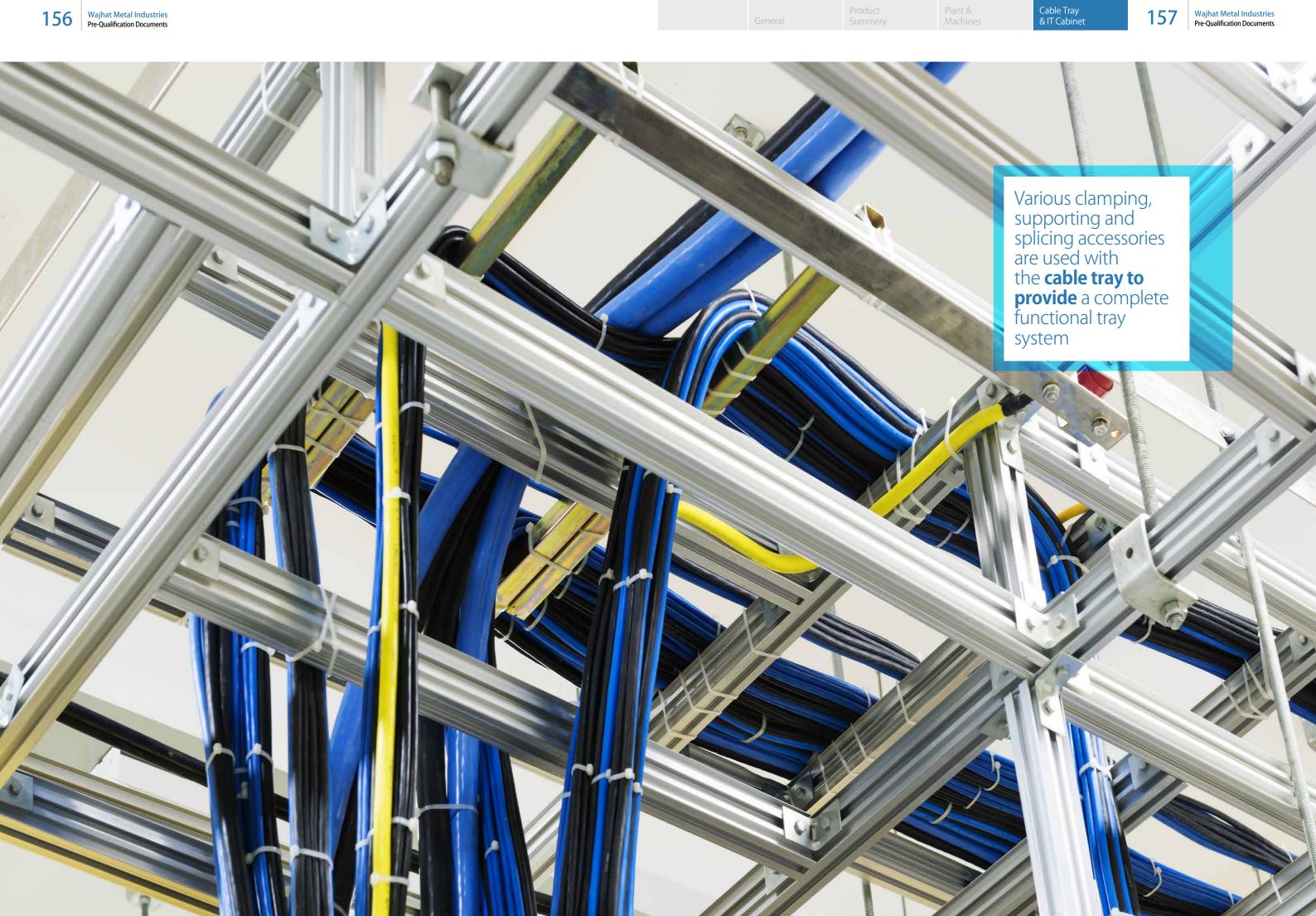


Cable Tray & IT Cabinet

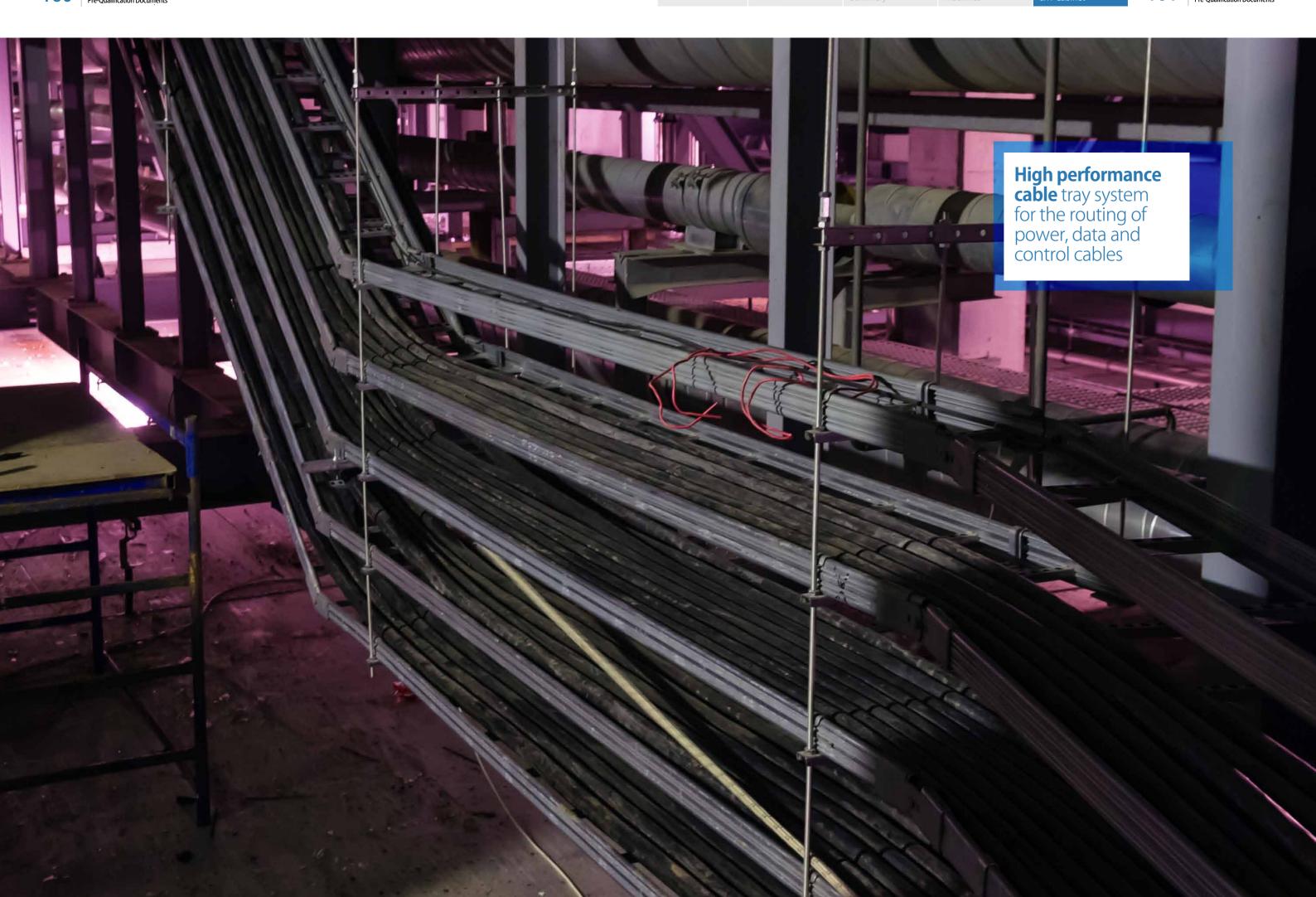


Cable Tray & IT Cabinet





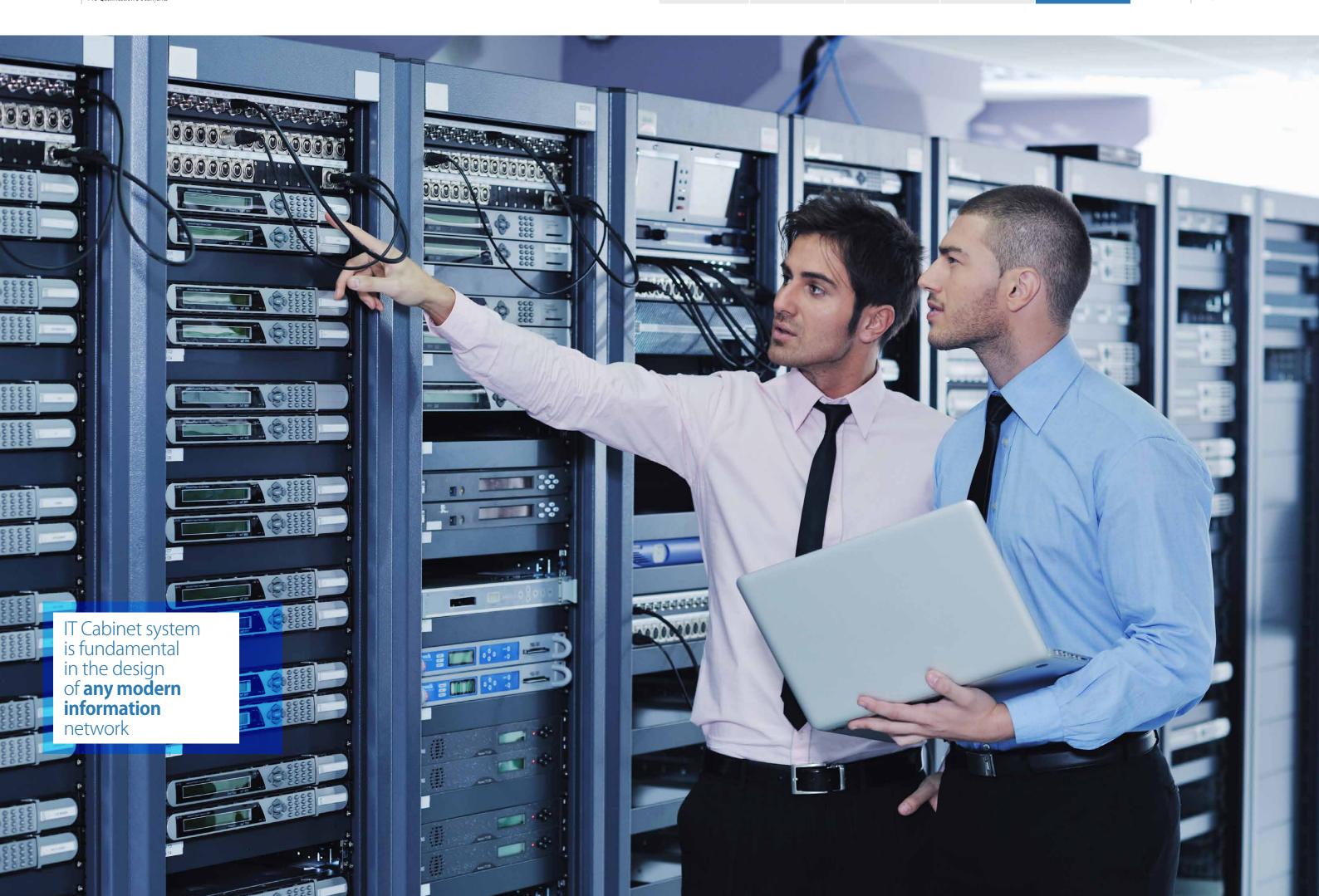






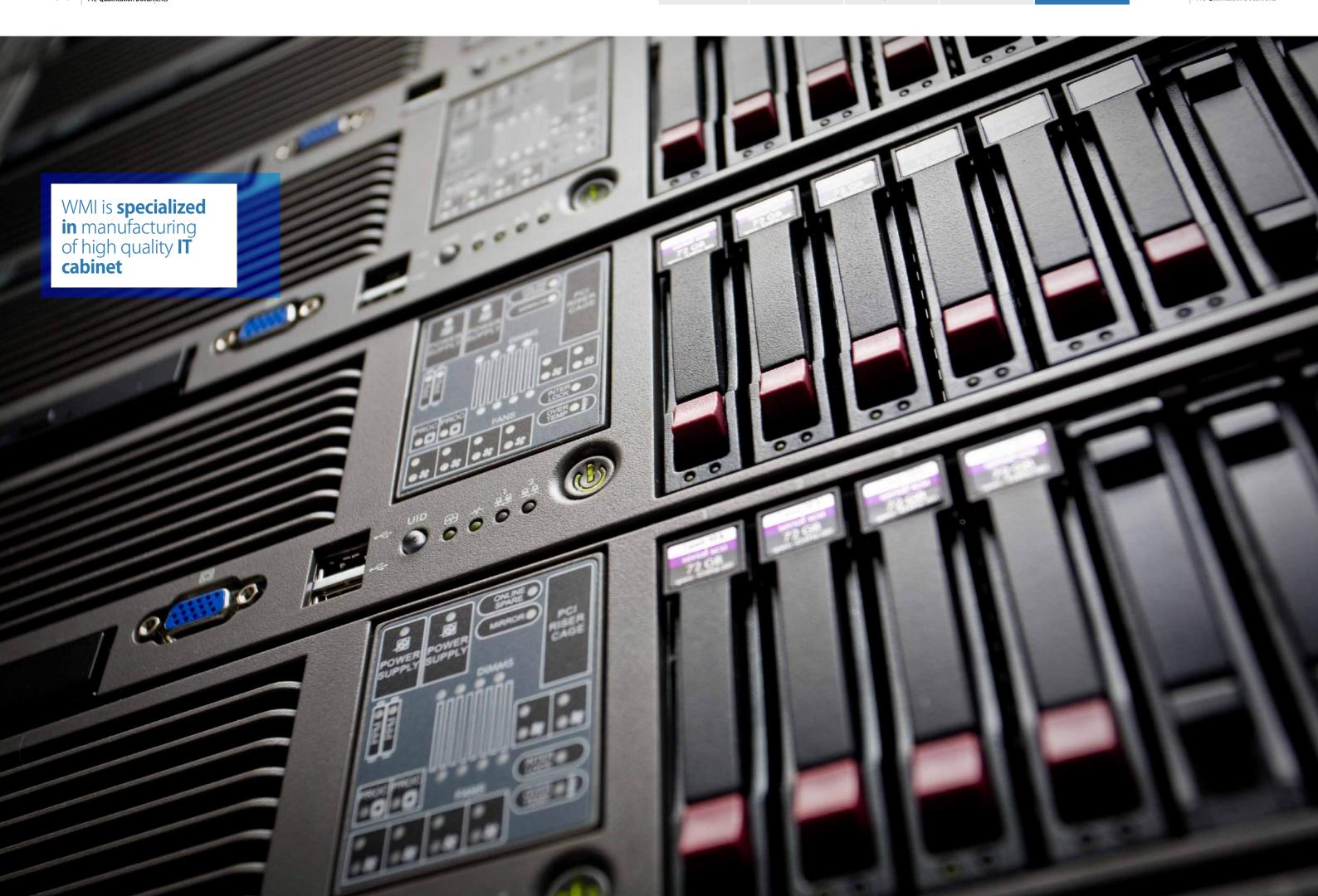
Cable Tray & IT Cabinet

165

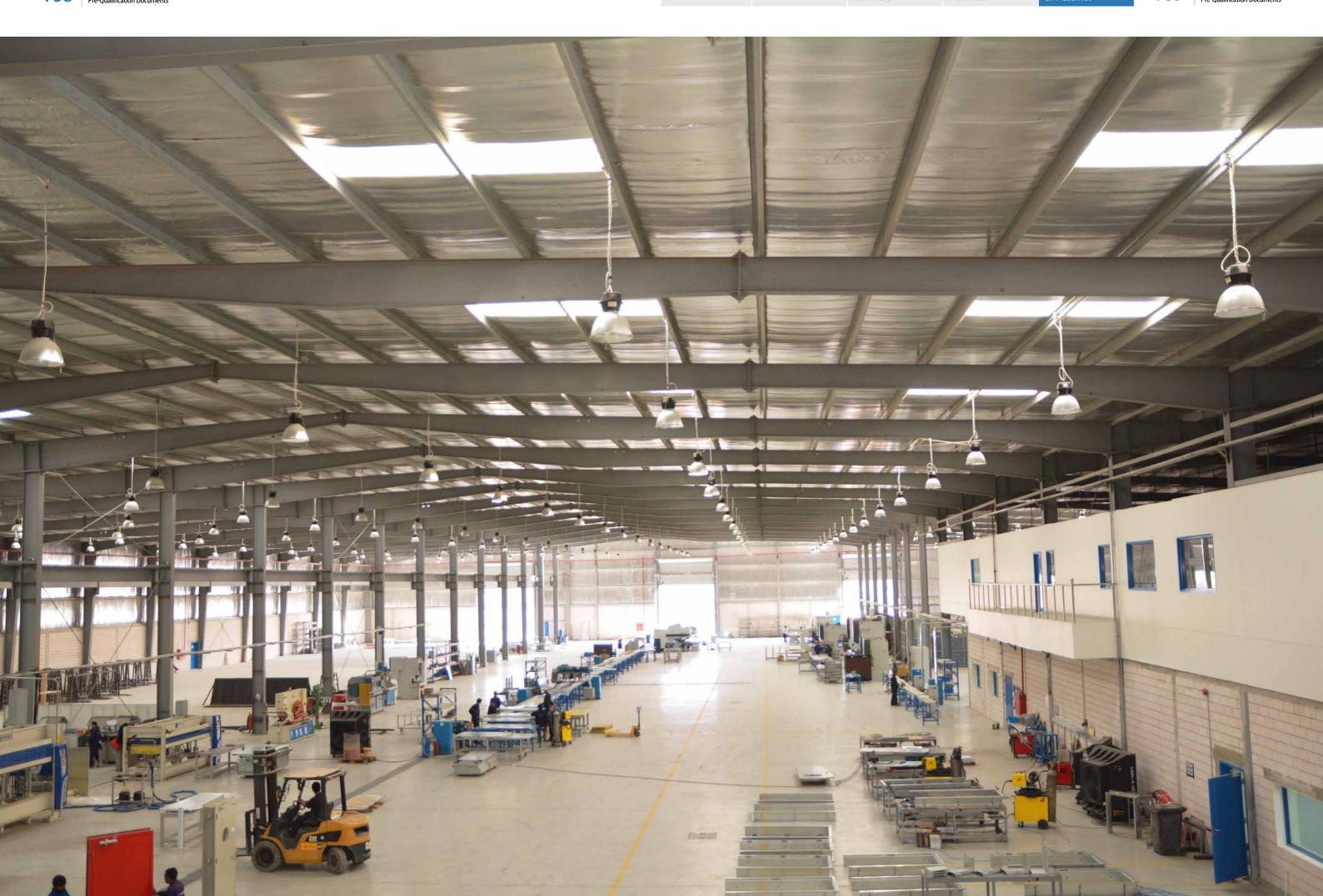


Cable Tray & IT Cabinet

167



Cable Tray & IT Cabinet



General

oduct Immerv Plant &

Cable Tray & IT Cabinet

171





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