



المصرية الألمانية
لتشكيل المعادن



Egyptian German
Metal Forming

لمزيد من
المعلومات
امسح الرمز



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Technical Data



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Material

Aluminum

ALUMINUM CABLE TRAYS ARE FABRICATED FROM STRUCTURAL GRADE (MARINE GRADE) ALUMINUM EXTRUSIONS. ALUMINUM'S EXCELLENT CORROSION RESISTANCE IS DUE TO ITS ABILITY TO FORM AN ALUMINUM OXIDE FILM THAT WHEN SCRATCHED OR CUT REFORMS THE ORIGINAL PROTECTIVE FILM. ALUMINUM HAS EXCELLENT RESISTANCE TO "WEATHERING" IN MOST OUTDOOR APPLICATIONS. ALUMINUM CABLE TRAY HAS EXCELLENT CORROSION RESISTANCE IN MANY CHEMICAL ENVIRONMENT, ALUMINUM CABLE TRAYS CAN PERFORM INDEFINITELY, WITH LITTLE OR NO DEGRADATION OVER TIME, MAKING IT IDEAL FOR MANY CHEMICAL AND MARINE ENVIRONMENTS. THE RESISTANCE TO CHEMICALS, INDOOR AND OUTDOOR, CAN BEST BE DETERMINED BY TESTS CONDUCTED BY THE USER WITH EXPOSURE TO THE SPECIFIC CONDITIONS FOR WHICH IT IS INTENDED. FOR FURTHER INFORMATION, CONTACT US

Steel

STEEL CABLE TRAYS ARE FABRICATED FROM CONTINUOUS ROLL-FORMED STRUCTURAL QUALITY STEEL. BY ROLL-FORMING STEEL, THE MECHANICAL PROPERTIES ARE INCREASED ALLOWING THE USE OF A LIGHTER GAUGE STEEL TO CARRY THE REQUIRED LOAD. THIS REDUCES THE DEAD WEIGHT THAT MUST BE CARRIED BY THE SUPPORTS AND THE INSTALLERS. USING STRUCTURAL QUALITY STEEL. EMECO ASSURES THAT THE MATERIAL WILL MEET THE MINIMUM YIELD AND TENSILE STRENGTHS OF APPLICABLE ASTM STANDARDS. ALL CABLE TRAY SIDE RAILS, RUNGS AND SPLICE PLATES ARE NUMBERED FOR MATERIAL TRACEABILITY. THE CORROSION RESISTANCE OF STEEL VARIES WIDELY WITH COATING AND ALLOY

Stainless Steel

STAINLESS STEEL CABLE TRAYS ARE FABRICATED FROM CONTINUOUS ROLL-FORMED AISI TYPE 304 OR AISI TYPE 316/316L STAINLESS STEEL. BOTH ARE NON-MAGNETIC AND BELONG TO THE GROUP CALLED AUSTENITIC STAINLESS STEELS. LIKE CARBON STEEL, THEY EXHIBIT INCREASED STRENGTH WHEN COLD WORKED BY ROLL-FORMING OR BENDING. SEVERAL IMPORTANT CONDITIONS COULD MAKE THE USE OF STAINLESS STEEL IMPERATIVE. THESE INCLUDE LONG TERM MAINTENANCE COSTS, CORROSION RESISTANCE, APPEARANCE AND LOCATIONS WHERE PRODUCT CONTAMINATION IS UNDESIRABLE. STAINLESS STEEL EXHIBITS STABLE STRUCTURAL PROPERTIES SUCH AS YIELD STRENGTH AND HIGH CREEP STRENGTH AT ELEVATED TEMPERATURES. EMECO'S STAINLESS STEEL CABLE TRAYS ARE WELDED USING STAINLESS STEEL WELDING WIRE TO ENSURE EACH WELDMENT EXHIBITS THE SAME CORROSION RESISTANT CHARACTERISTIC AS THE BASE METAL. LOCALIZED STAINING IN THE WELD AREA OR HEAT AFFECTED ZONE MAY OCCUR IN SEVERE ENVIRONMENTS. SPECIALIZED SHIELDING GASES AND LOW CARBON MATERIALS ARE USED TO MINIMIZE CARBON CONTAMINATION DURING WELDING AND REDUCE STAINING AND STRESS CORROSION. SPECIFY PASSIVATION AFTER FABRICATION PER ASTM A380 TO MINIMIZE STAINING, IMPROVE AESTHETICS AND FURTHER IMPROVE CORROSION RESISTANCE

FINISH

Zinc Coatings

ZINC PROTECTS STEEL IN TWO WAYS. FIRST IT PROTECTS THE STEEL AS A COATING AND SECOND AS A SACRIFICIAL ANODE TO REPAIR BARE AREAS SUCH AS CUT EDGES, SCRATCHES, AND GOUGES. THE CORROSION PROTECTION OF ZINC IS DIRECTLY RELATED TO ITS THICKNESS AND THE ENVIRONMENT. THIS MEANS A 2 MIL COATING WILL LAST TWICE AS LONG AS A .1 MIL COATING IN THE SAME ENVIRONMENT

Galvanizing also protects cut and drilled edges.



Electro galvanized Zinc. ASTM B633

ELECTRO GALVANIZED ZINC (ALSO KNOWN AS ZINC PLATED OR ELECTROPLATED) IS THE PROCESS BY WHICH A COATING OF ZINC IS DEPOSITED ON THE STEEL BY ELECTROLYSIS FROM A BATH OF ZINC SALTS. THIS FINISH IS STANDARD FOR CABLE TRAY HARDWARE AND SOME ACCESSORIES FOR ALUMINUM AND PRE-GALVANIZED SYSTEMS. PROVIDES A MINIMUM ZINC COATING THICKNESS OF 5 MILS WHEN EXPOSED TO AIR AND MOISTURE, ZINC FORMS A TOUGH, ADHERENT, PROTECTIVE FILM CONSISTING OF A MIXTURE OF ZINC OXIDES, HYDROXIDES, AND CARBONATES. THIS FILM IS IN ITSELF A BARRIER COATING WHICH SLOWS SUBSEQUENT CORROSIVE ATTACK ON THE ZINC. THIS COATING IS USUALLY RECOMMENDED FOR INDOOR USE IN RELATIVELY DRY AREAS, AS IT PROVIDES NINETY-SIX .HOURS PROTECTION IN SALT SPRAY TESTING PER ASTM B117

Pre-Galvanized Zinc. ASTM A653

MILL GALVANIZED, HOT DIP MILL GALVANIZED OR CONTINUOUS HOT DIP GALVANIZED PRE-GALVANIZED STEEL IS PRODUCED BY COATING COILS OF SHEET STEEL WITH ZINC BY CONTINUOUSLY ROLLING THE MATERIAL THROUGH MOLTEN ZINC AT THE MILLS. THIS IS ALSO KNOWN AS MILL GALVANIZED OR HOT DIP MILL GALVANIZED. THESE COILS ARE THEN SLIT TO SIZE AND FABRICATED BY ROLL FORMING, SHEARING, PUNCHING, OR FORMING TO PRODUCE EMECO PRE GALVANIZED CABLE TRAY PRODUCTS. THE G90 SPECIFICATION CALLS FOR A COATING OF 90 OUNCES OF ZINC PER SQUARE FOOT OF STEEL. THIS RESULTS IN A COATING OF 45 OUNCES PER SQUARE FOOT ON EACH SIDE OF THE SHEET. THIS IS IMPORTANT WHEN COMPARING THIS FINISH TO HOT DIP GALVANIZED AFTER FABRICATION. DURING FABRICATION, CUT EDGES AND WELDED AREAS ARE NOT NORMALLY ZINC COATED; HOWEVER, THE ZINC NEAR THE UNCOATED METAL BECOMES A SACRIFICIAL ANODE TO PROTECT THE .BARE AREAS AFTER A SHORT PERIOD OF TIME

Hot Dip Galvanized After Fabrication. ASTM A123

HOT DIP GALVANIZED OR BATCH HOT DIP GALVANIZED) HOT DIP GALVANIZED AFTER FABRICATION CABLE TRAY PRODUCTS ARE FABRICATED FROM STEEL AND THEN COMPLETELY IMMersed IN A BATH OF MOLTEN ZINC. A METALLIC BOND OCCURS RESULTING IN A ZINC COATING THAT COMPLETELY COATS ALL SURFACES, INCLUDING EDGES AND WELDS. ANOTHER ADVANTAGE OF THIS METHOD IS COATING THICKNESS. CABLE TRAYS HOT DIP GALVANIZED AFTER FABRICATION HAVE A MINIMUM THICKNESS OF 1.50 OUNCES PER SQUARE FOOT ON EACH SIDE, OR A TOTAL 3.0 OUNCES PER SQUARE FOOT OF STEEL, ACCORDING TO ASTM A123. THE ZINC THICKNESS IS CONTROLLED BY THE AMOUNT OF TIME EACH PART IS IMMersed IN THE MOLTEN ZINC BATH AS WELL AS THE SPEED AT WHICH IT IS REMOVED. THE TERM "DOUBLE DIPPING" REFERS TO PARTS TOO LARGE TO FIT INTO THE GALVANIZING KETTLE AND THEREFORE, MUST BE DIPPED ONE END AT A TIME. IT DOES NOT REFER TO EXTRA COATING THICKNESS. THE LAYER OF ZINC WHICH BONDS TO STEEL PROVIDES A DUAL PROTECTION AGAINST CORROSION. IT PROTECTS FIRST AS AN OVERALL BARRIER COATING. IF THIS COATING HAPPENS TO BE SCRATCHED OR GOUGED, ZINC'S SECONDARY DEFENSE IS CALLED UPON TO PROTECT THE STEEL BY GALVANIC ACTION. HOT DIP GALVANIZED AFTER FABRICATION IS RECOMMENDED FOR PROLONGED OUTDOOR EXPOSURE AND WILL PROTECT STEEL FOR MANY YEARS IN MOST OUTDOOR ENVIRONMENTS AND IN MANY AGGRESSIVE INDUSTRIAL ENVIRONMENTS

Painting Cable Tray

ETAC OFFERS PAINTED CABLE TRAY TO ANY COLOR SPECIFIED BY THE CUSTOMER. IT IS IMPORTANT TO NOTE THAT THERE ARE KEY ADVANTAGES AND DISADVANTAGES TO ORDERING FACTORY PAINTED CABLE TRAY. PAINTED CABLE TRAY IS OFTEN USED IN "OPEN CEILING" APPLICATIONS, WHERE ALL THE OVERHEAD EQUIPMENT AND STRUCTURE IS PAINTED THE SAME COLOR. IN THIS TYPE OF APPLICATION, ADDITIONAL PAINTING IS OFTEN NECESSARY IN THE FIELD, AFTER INSTALLATION TO ENSURE ALL OF THE SUPPORTING COMPONENTS, SUCH AS HANGER RODS, CLAMPS AND ATTACHING HARDWARE HAVE BEEN PAINTED UNIFORMLY. REPAINTED CABLE TRAY INTERFERES WITH COMMON GROUNDING PRACTICES, REQUIRING THE PAINT TO BE REMOVED AT SPLICE LOCATIONS, AND/OR THE ADDITION OF BONDING JUMPERS THAT WERE OTHERWISE UNNECESSARY. THIS ADDITIONAL FIELD MODIFICATION NOT ONLY INCREASES THE INSTALLATION COST, BUT CAUSES POTENTIAL DAMAGE TO THE SPECIAL .PAINTED FINISH. WE CAN PAINT CABLE TRAY IN 2 CASES AFTER ELECTROPLATING AND AFTER HOT DIP GALVANIZING PROCESS

.ELECTROSTATIC PAINTING -

.POLY URETHANE PAINTING -

Welding

THE WELDING PROCEDURES USED IN THE FABRICATION OF ALL EMECO CABLE TRAYS AND ACCESSORIES ARE IN ACCORDANCE WITH THE LATEST AMERICAN WELDING SOCIETY STANDARD, AWS D1.3. EMECO STEEL, STAINLESS STEEL & ALUMINUM CABLE TRAYS ARE WELDED BY THE MIG (METAL INSERT GAS) WELDING PROCESS PRODUCING SMOOTH, CLEAN, SLAG-FREE WELDMENTS

Corrosion

ALL METAL SURFACES ARE AFFECTED BY CORROSION. DEPENDING ON THE PHYSICAL PROPERTIES OF THE METAL AND THE ENVIRONMENT TO WHICH IT IS EXPOSED, CHEMICAL OR ELECTROMECHANICAL CORROSION MAY OCCUR

Atmospheric Corrosion

ATMOSPHERIC CORROSION OCCURS WHEN METAL IS EXPOSED TO AIRBORNE LIQUIDS, SOLIDS OR GASES. SOME SOURCES OF ATMOSPHERIC CORROSION ARE MOISTURE, SALT, DIRT AND SULPHURIC ACID. THIS FORM OF CORROSION IS TYPICALLY WORSE OUTDOORS, ESPECIALLY NEAR MARINE ENVIRONMENTS

Chemical Corrosion

CHEMICAL CORROSION TAKES PLACE WHEN METAL COMES IN DIRECT CONTACT WITH A CORROSIVE SOLUTION. SOME FACTORS WHICH AFFECT THE SEVERITY OF CHEMICAL CORROSION INCLUDE: CHEMICAL CONCENTRATION LEVEL, DURATION OF CONTACT, FREQUENCY OF WASHING, AND OPERATING TEMPERATURE

Storage Corrosion

WET STORAGE STAIN (WHITE RUST) IS CAUSED BY THE ENTRAPMENT OF MOISTURE BETWEEN SURFACES OF CLOSELY PACKED AND POORLY VENTILATED MATERIAL FOR AN EXTENDED PERIOD. WET STORAGE STAIN IS USUALLY SUPERFICIAL, HAVING NO AFFECT ON THE PROPERTIES OF THE METAL. LIGHT STAINING NORMALLY DISAPPEARS WITH WEATHERING. MEDIUM TO HEAVY BUILDUP SHOULD BE REMOVED, IN ORDER TO ALLOW THE FORMATION OF NORMAL PROTECTIVE FILM. PROPER HANDLING AND STORAGE WILL HELP TO ASSURE STAIN-FREE MATERIAL. IF PRODUCT ARRIVES WET, IT SHOULD BE UNPACKED AND DRIED BEFORE STORAGE. DRY MATERIAL SHOULD BE STORED IN A WELL VENTILATED "LOW MOISTURE" ENVIRONMENT TO AVOID CONDENSATION FORMATION. OUTDOOR STORAGE IS UNDESIRABLE, AND SHOULD BE AVOIDED WHENEVER POSSIBLE

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THE AMOUNT AND CONCENTRATION OF ELECTROLYTE PRESENT- AN INDOOR, DRY ENVIRONMENT WILL HAVE LITTLE OR NO GALVANIC CORROSION COMPARED TO A WET ATMOSPHERE .1

THE RELATIVE SIZE OF THE MATERIALS- A SMALL AMOUNT OF ANODIC MATERIAL IN CONTACT WITH A LARGE CATHODIC MATERIAL WILL RESULT IN GREATER CORROSION. LIKEWISE, A LARGE ANODE IN CONTACT WITH A SMALL CATHODE WILL DECREASE THE RATE OF ATTACK .2

THE RELATIVE POSITION ON THE GALVANIC SERIES TABLE - THE FURTHER APART IN THE GALVANIC SERIES TABLE, THE GREATER THE POTENTIAL FOR CORROSION OF THE ANODIC MATERIAL .3

Installation Considerations

WEIGHT THE WEIGHT OF AN ALUMINUM CABLE TRAY IS APPROXIMATELY HALF THAT OF A COMPARABLE STEEL TRAY. SOME FACTORS TO CONSIDER INCLUDE: SHIPPING COSTS, MATERIAL, HANDLING, PROJECT WEIGHT RESTRICTIONS AND THE STRENGTH OF SUPPORT MEMBERS

Field Modifications

ALUMINUM CABLE TRAY IS EASIER TO CUT AND DRILL THAN STEEL CABLE TRAY SINCE IT IS A "SOFTER" MATERIAL. SIMILARLY, GALVANIZED STEEL CABLE TRAY IS EASIER TO CUT AND DRILL THAN STAINLESS STEEL CABLE TRAY. ALUMINUM CABLE TRAY USES A FOUR BOLT SPLICE, RESULTING IN HALF AS MUCH DRILLING AND HARDWARE INSTALLATION AS MOST STEEL CABLE TRAY, WHICH USES AN EIGHT BOLT SPLICE, HOT DIP GALVANIZED AND PAINTED STEEL CABLE TRAY FINISHES MUST BE REPAIRED WHEN FIELD CUTTING OR DRILLING. FAILURE TO REPAIR COATINGS WILL IMPAIR THE CABLE TRAY'S CORROSION RESISTANCE

Availability

ALUMINUM, PRE-GALVANIZED, STAINLESS STEEL AND FIBERGLASS CABLE TRAY CAN NORMALLY BE SHIPPED FROM THE FACTORY IN A SHORT PERIOD OF TIME. HOT DIP GALVANIZED AND PAINTED CABLE TRAY REQUIRES AN ADDITIONAL COATING PROCESS, ADDING SEVERAL DAYS OF PREPARATION BEFORE FINAL SHIPMENT. TYPICALLY, A COATED CABLE TRAY WILL BE SENT TO AN OUTSIDE SOURCE FOR COATING, REQUIRING ADDITIONAL PACKING AND SHIPPING

Electrical Grounding Capacity

THE NATIONAL ELECTRICAL CODE, ARTICLE 392.7 ALLOWS CABLE TRAY TO BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR. ALL EMECO STANDARD STEEL AND ALUMINUM CABLE TRAYS ARE CLASSIFIED BY UNDERWRITER'S LABORATORIES PER NEC TABLE 392.7 BASED ON THEIR CROSS-SECTIONAL AREA. THE CORRESPONDING CROSS-SECTIONAL AREA FOR EACH SIDE RAIL DESIGN (2 SIDE RAILS) IS LISTED ON A FADE RESISTANT UV STABILIZED LABEL, THIS CABLE TRAY LABEL IS ATTACHED TO EACH STRAIGHT SECTION AND FITTING THAT IS U.L. CLASSIFIED. U.L. ASSIGNED CROSS-SECTIONAL AREA IS ALSO STATED IN THE LOADING CHARTS IN THIS CATALOG FOR EACH SYSTEM NEMA INSTALLATION GUIDE

THE NEW NEMA VE 2 IS A CABLE TRAY INSTALLATION GUIDELINE AND IS AVAILABLE FROM NEMA

Environmental Loads Wind Loads

WIND LOADS NEED TO BE DETERMINED FOR ALL OUTDOOR CABLE TRAY INSTALLATIONS. MOST OUTDOOR CABLE TRAYS ARE LADDER TYPE TRAYS; THEREFORE THE MOST SEVERE LOADING TO BE CONSIDERED IS IMPACT PRESSURE NORMAL TO THE CABLE TRAY SIDE RAILS

V(MPH)	P(IBS/FT2)	V(MPH)	P(IBS/FT2)
15	0.58	85	18.5
20	1.02	90	20.7
25	1.60	95	23.1
30	2.30	100	25.6
35	3.13	105	28.2
40	4.09	110	30.9
45	5.18	115	33.8
50	6.39	120	36.8
55	7.73	125	40.0
60	9.21	130	43.3
65	10.80	135	46.6
70	12.50	140	50.1
75	14.40	145	53.8
80	16.40	150	57.6

V= Wind Velocity
P= Impact Pressure



Example Calculation

SIDE LOAD FOR 6" SIDE RAIL WITH 100 MPH WIND $\frac{25.6 \times 6}{12} = 12.8 \text{ lbs/ft}$

WHEN COVERS ARE INSTALLED ON OUTDOOR CABLE TRAYS, ANOTHER FACTOR TO BE CONSIDERED IS THE AERODYNAMIC EFFECT WHICH CAN PRODUCE A LIFT STRONG ENOUGH TO RECOMMENDS THE USE OF HEAVY DUTY WRAPAROUND COVER .CLAMPS WHEN COVERED TRAYS ARE INSTALLED IN AN AREA WHERE STRONG WINDS OCCUR

Special Notice

COVERS ON WIDE CABLE TRAY AND/OR CABLE TRAY INSTALLED AT ELEVATIONS HIGHER OFF THE GROUND MAY REQUIRE ADDITIONAL HEAVY DUTY CLAMPS OR THICKER COVER MATERIAL ICE LOADS

Environmental Loads Snow Loads

SNOW IS MEASURED BY DENSITY AND THICKNESS. THE DENSITY OF SNOW VARIES ALMOST AS MUCH AS ITS THICKNESS. THE ADDITIONAL DESIGN LOAD FROM SNOWFALL SHOULD BE DETERMINED USING THE BUILDING CODES WHICH APPLY FOR EACH INSTALLATION

Seismic Loads

A GREAT DEAL OF SEISMIC TESTING AND EVALUATION OF CABLE TRAY SYSTEMS, AND THEIR SUPPORTS, HAS BEEN PERFORMED. THE CONCLUSIONS REACHED FROM THESE EVALUATIONS IS THAT CABLE TRAY IS STRONGER Laterally than vertically, since it acts as a TRUSS in the lateral direction. OTHER FACTORS THAT CONTRIBUTE TO THE STABILITY OF CABLE TRAY ARE THE ENERGY DISSIPATING MOTION OF THE CABLES WITHIN THE TRAY, AND THE HIGH DEGREE OF DUCTILITY OF THE CABLE TRAY AND THE SUPPORT MATERIAL. THESE FACTORS, WORKING IN CONJUNCTION WITH A PROPERLY DESIGNED CABLE TRAY SYSTEM, SHOULD AFFORD REASONABLE ASSURANCE TO WITHSTAND EVEN STRONG MOTION EARTHQUAKES. WHEN SEISMIC BRACING IS REQUIRED FOR A CABLE TRAY SYSTEM, IT SHOULD BE APPLIED TO THE SUPPORTS AND NOT THE .CABLE TRAY ITSELF

Concentrated Loads

A CONCENTRATED STATIC LOAD REPRESENTS A STATIC WEIGHT APPLIED AT A SINGLE POINT BETWEEN THE SIDES RAILS. TAP BOXES, CONDUIT ATTACHMENTS AND LONG CABLE DROPS ARE JUST SOME OF THE MANY TYPES OF CONCENTRATED LOADS. WHEN SO SPECIFIED, THESE CONCENTRATED STATIC LOADS MAY BE CONVERTED TO AN EQUIVALENT, UNIFORM :LOAD (We) BY USING THE FOLLOWING FORMULA

$$We = \frac{2 \times (\text{concentrated Static Load})}{\text{Span length}}$$

ETAC CABLE TRAY SIDE RAILS, RUNGS AND BOTTOMS WILL WITHSTAND A 200 LB. STATIC LOAD WITHOUT COLLAPSE HOWEVER, IT SHOULD BE NOTED THAT PER NEMA STANDARD PUBLICATION VE1 CABLE TRAY IS DESIGNED AS A SUPPORT FOR .POWER OR CONTROL CABLES, OR BOTH, AND IS NOT INTENDED OR DESIGNED TO BE A WALKWAY FOR PERSONNEL

Support Span

THE STRENGTH OF A CABLE TRAY IS LARGELY DETERMINED BY THE STRENGTH OF ITS SIDE RAILS. THE STRENGTH OF A CABLE TRAY SIDE RAIL IS PROPORTIONATE TO THE DISTANCE BETWEEN THE SUPPORTS ON WHICH IT IS INSTALLED, COMMONLY REFERRED TO AS THE "SUPPORT SPAN". THEREFORE, THE STRENGTH OF A CABLE TRAY SYSTEM CAN BE ALTERED BY CHANGING THE SUPPORT SPAN. HOWEVER, THERE IS A LIMIT TO HOW MUCH THE STRENGTH OF A CABLE TRAY SYSTEM CAN BE INCREASED BY REDUCING THE SUPPORT SPAN, BECAUSE THE STRENGTH OF THE CABLE TRAY BOTTOM MEMBERS COULD BECOME THE DETERMINING FACTOR OF STRENGTH. ONCE THE LOAD REQUIREMENT OF A CABLE TRAY SYSTEM HAS BEEN ESTABLISHED, THE FOLLOWING :FACTORS SHOULD BE CONSIDERED

SOMETIMES THE LOCATION OF EXISTING STRUCTURAL BEAMS WILL DICTATE THE CABLE TRAY SUPPORT SPAN. THIS IS TYPICAL WITH OUTDOOR INSTALLA- .1 TIONS WHERE ADDING INTERMEDIATE SUPPORTS COULD BE FINANCIALLY PROHIBITIVE. FOR THIS SITUATION THE APPROPRIATE CABLE TRAY MUST BE .SELECTED TO ACCOMMODATE THE EXISTING SPAN

WHEN CABLE TRAY SUPPORTS ARE RANDOMLY LOCATED, THE ADDED COST OF A HIGHER STRENGTH CABLE TRAY SYSTEM SHOULD BE COMPARED TO .2 .THE COST OF ADDITIONAL SUPPORTS. TYPICALLY, ADDING SUPPORTS IS MORE COSTLY THAN INSTALLING A STRONGER SERIES OF CABLE TRAY

THE SUPPORT SPAN LENGTHS SHOULD BE EQUAL TO OR LESS THAN UNPLACED STRAIGHT SECTION LENGTHS, TO ENSURE THAT NO MORE THAN ONE .3 .SPLICE IS PLACED BETWEEN SUPPORTS AS STATED IN THE NEMA VE 2 CABLE TRAY INSTALLATION GUIDELINE

Deflection

DEFLECTION IN A CABLE TRAY SYSTEM IS PRIMARILY AN AESTHETIC CONSIDERATION. WHEN A CABLE TRAY SYSTEM IS INSTALLED IN A PROMINENT LOCATION, A MAXIMUM SIMPLE BEAM DEFLECTION OF 1/200 OF SUPPORT SPAN CAN BE USED AS A GUIDELINE TO MINIMIZE VISUAL DEFLECTION. IT IS IMPORTANT AT THIS POINT TO MENTION THAT THERE ARE TWO TYPICAL BEAM CONFIGURATIONS, SIMPLE BEAM AND CONTINUOUS BEAM, AND TO CLARIFY THE DIFFERENCE. A GOOD EXAMPLE OF A SIMPLE BEAM IS A SINGLE STRAIGHT SECTION OF CABLE TRAY SUPPORTED, BUT NOT FASTENED AT EITHER END. WHEN THE TRAY IS LOADED THE CABLE TRAY IS ALLOWED TO FLEX. SIMPLE BEAM ANALYSIS IS USED ALMOST UNIVERSALLY FOR BEAM COMPARISONS EVEN THOUGH IT IS SELDOM PRACTICAL IN THE FIELD INSTALLATIONS. THE THREE MOST PROMINENT REASONS FOR USING A SIMPLE BEAM ANALYSIS ARE: CALCULATIONS ARE SIMPLIFIED; IT REPRESENTS THE WORST CASE LOADING; AND TESTING IS SIMPLE AND RELIABLE. THE PUBLISHED LOAD DATA IN THE ETAC CABLE TRAY CATALOG IS BASED ON THE SIMPLE BEAM ANALYSIS PER NEMA & CSA STANDARDS

Technical Data

Simple Beam



CONTINUOUS BEAM IS THE BEAM CONFIGURATION MOST COMMONLY USED IN CABLE TRAY INSTALLATIONS. AN EXAMPLE OF THIS CONFIGURATION IS WHERE CABLE TRAYS ARE INSTALLED ACROSS SEVERAL SUPPORTS TO FORM A NUMBER OF SPANS. THE CONTINUOUS BEAM POSSESSES TRAITS OF BOTH THE SIMPLE AND FIXED BEAMS. WHEN EQUAL LOADS ARE APPLIED TO ALL SPANS SIMULTANEOUSLY, THE COUNTERBALANCING EFFECT OF THE LOADS ON BOTH SIDES OF A SUPPORT RESTRICTS THE MOVEMENT OF THE CABLE TRAY AT THE SUPPORT. THE EFFECT IS SIMILAR TO THAT OF A FIXED BEAM. THE END SPANS BEHAVE SUBSTANTIALLY LIKE SIMPLE BEAMS. WHEN CABLE TRAYS OF IDENTICAL DESIGN ARE COMPARED, THE CONTINUOUS BEAM INSTALLATION WILL TYPICALLY HAVE APPROXIMATELY HALF THE DEFLECTION OF A SIMPLE BEAM OF THE SAME SPAN. THEREFORE SIMPLE BEAM DATA SHOULD BE USED ONLY AS A GENERAL COMPARISON. THE FOLLOWING FACTORS SHOULD BE CONSIDERED WHEN ADDRESSING CABLE TRAY DEFLECTION

1-ECONOMIC CONSIDERATION MUST BE CONSIDERED WHEN ADDRESSING CABLE DEFLECTION CRITERIA

2-DEFLECTION IN A CABLE TRAY SYSTEM CAN BE REDUCED BY DECREASING THE SUPPORT SPAN, OR BY USING A TALLER OR STRONGER CABLE TRAY

3-WHEN COMPARING CABLE TRAYS OF EQUIVALENT STRENGTH, A STEEL CABLE TRAY WILL TYPICALLY EXHIBIT LESS DEFLECTION THAN AN ALUMINUM CABLE TRAY SINCE THE MODULUS OF ELASTICITY OF STEEL IS NEARLY THREE TIMES THAT OF ALUMINUM

4-THE LOCATION OF SPLICES IN A CONTINUOUS SPAN WILL AFFECT THE DEFLECTION OF THE CABLE TRAY SYSTEM. THE SPLICES SHOULD BE LOCATED AT POINTS OF MINIMUM STRESS WHENEVER PRACTICAL. NEMA STANDARDS VE 1 LIMITS THE USE OF SPLICE PLATES AS

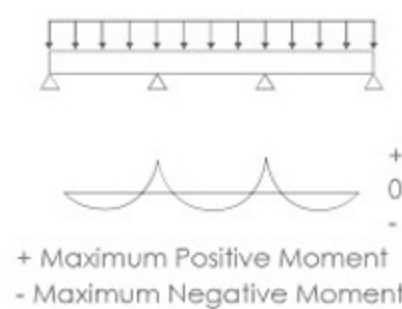
FOLLOWS: UNSPLICED STRAIGHT SECTIONS SHOULD BE USED ON ALL SIMPLE SPANS AND ON END SPANS OF CONTINUOUS SPAN

RUNS. STRAIGHT SECTION LENGTHS SHOULD BE EQUAL TO OR GREATER THAN THE SPAN LENGTH TO ENSURE NOT MORE THAN ONE

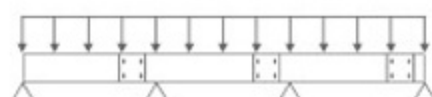
SPLICE BETWEEN SUPPORTS. SEE THE FIGURES BELOW FOR SPLICING CONFIGURATION

SAMPLES

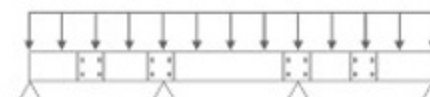
Typical Continuous Span Configuration



Preferred Splice Plate Locations



Undesirable Splice Plate Locations



CABLE TRAY SELCTION

A- NOT ALL CABLES ARE THE SAME. TO SELECT THE PERFECT CABLE SUPPORT SYSTEM, YOU NEED TO KNOW WHICH TYPES OF CABLES ARE TO BE LAID

B- DATA CABLES, WHICH MUST BE LAID AT A CERTAIN DISTANCE FROM EACH OTHER ON ACCOUNT OF THE NECESSARY SHIELDING

C- POWER CABLES, FOR WHICH A NOT INCONSIDERABLE HEAT BUILDUP MUST BE ALLOWED FOR? FOR ALL THESE APPLICATIONS ECAT CAN OFFER TAILOR-MADE SYSTEM SOLUTIONS

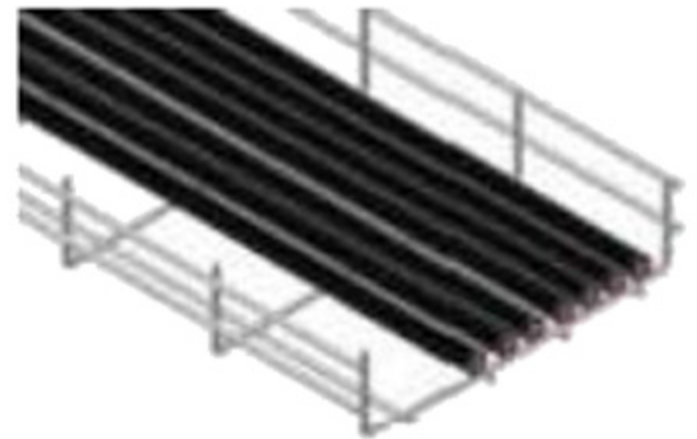
PERFORATED CABLE TRAYS

AREAS OF APPLICATION: FROM LOW VOLTAGE CABLING TO POWER SUPPLY



MESH CABLE TRAYS FOR THE INSTALLATION OF LIGHT CABLES

AREAS OF APPLICATION: IT CABLING, TELEPHONE CABLING AND CONTROL CABLES. ALSO SUITABLE FOR USE IN FALSE CEILINGS AND CAVITY FLOORS



CABLE LADDERS FOR POWER CABLES WITH A LARGE CROSS-SECTION

AREAS OF APPLICATION: CABLES AND POWER CONDUCTORS WITH LARGE CROSS-SECTIONS. THESE CAN BE FASTENED TO THE RUNGS USING CLAMP CLIPS. THE HIGH LOAD CAPACITY AND GOOD VENTILATION ENSURE PERFECT CABLE LYING





المصرية الألمانية
لتشكيل المعادن

Supporting



المصرية الألمانية
لتشكيل المعادن



PROFILES

Material

STEEL 37 - STAINLESS STEEL (304 - 304L-316-316L) - ALUMINUM (6063)

Finish

HOT DIP GALVANIZED AFTER FABRICATION

ELECTRO PLATED

.ELECTRO STATIC COATED

Technical Data

STANDARD LENGTH (2000-3000 - 6000 MM) STANDARD THICKNESS (2-2.5-3 MM)

Unistrut



U-41x41
Single channel



Solid channel
SU-41x41



Perforated
PU-41x41

Oblong size
25x10 mm
30x13 mm



DU-41x41
Double channel



Solid channel
SDU-41x41



Perforated
PDU-41x41

Oblong size
25x10 mm
30x13 mm

C Profile



C - WxH
Single channel

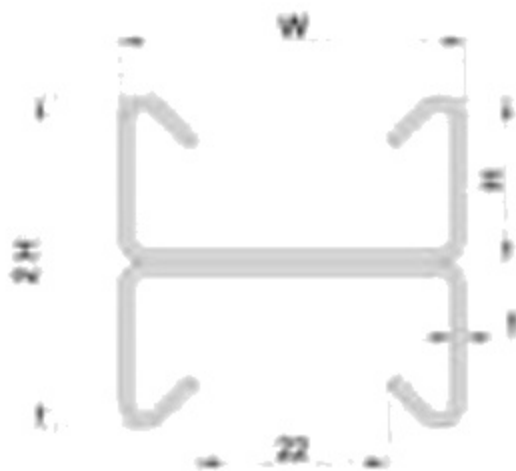


Solid channel
SC - WxH



Perforated
PC - WxH

Oblong size
25x10 mm
30x13 mm



DC - WxH
Single channel

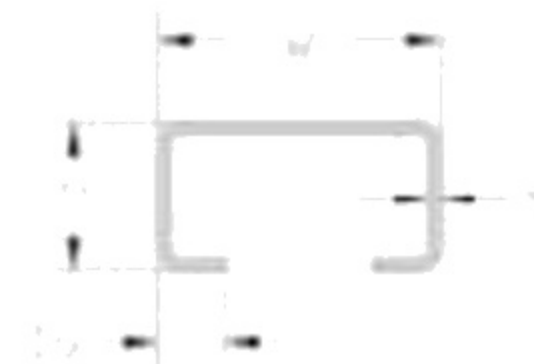


Solid channel
SDC - WxH



Perforated
PDC - WxH

Oblong size
25x10 mm
30x13 mm



CH - WxH
Single channel



Solid channel
SCH - WxH



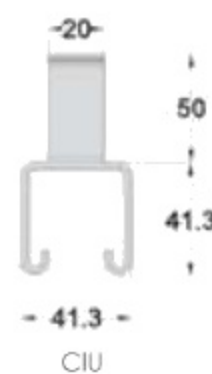
Perforated
PCH - WxH

Oblong size
25x10 mm
30x13 mm

Available sizes for C channel

W	H	thickness
41	25	1.5 - 2 - 2.5 - 3
40	41	1.5 - 2 - 2.5 - 3
50	25	1.5 - 2 - 2.5 - 3

Concrete insert Channel



U Channel



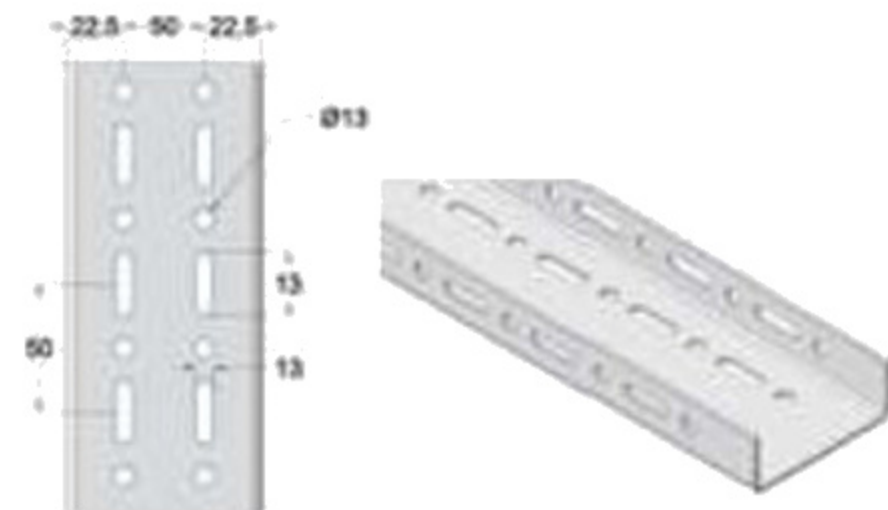
UC-WxH



Solid Channel (SUCH)
PUC-50x25



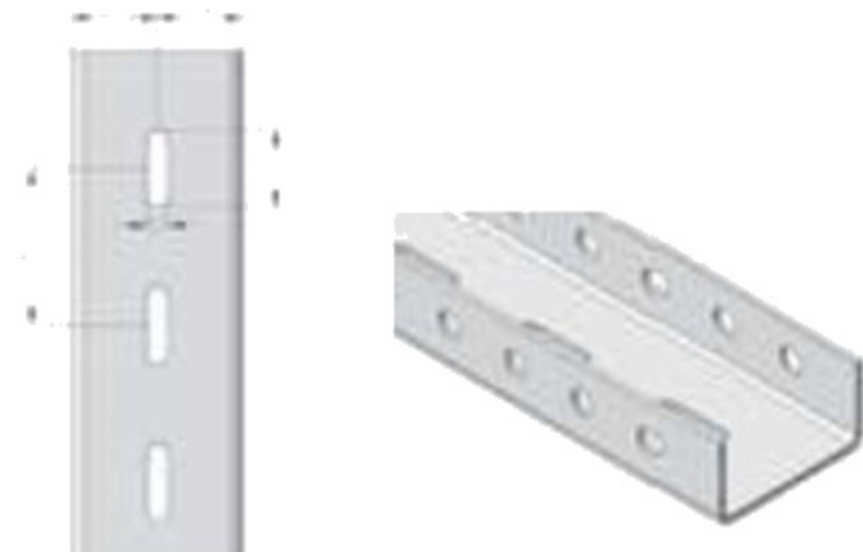
Perforated Channel 50x35 mm
PUC-50x35



Perforated Channel 90x45 mm
PUC-90x45

Available sizes

W	H	thickness
50	25	1.5 - 2
50	30	1.5 - 2 - 2.5 - 3
50	35	1.5 - 2 - 2.5 - 3
90	45	1.5 - 2 - 2.5 - 3



Perforated Channel 50x25 mm
PUC-50x25

Omega Channel



OC-WxHxa



Solid omega channel
SOC-WxHxa



Perforated omega channel (POCH)
POC-WxHxa

Angular Omega



OA-WxHxa



Solid omega channel
SOA-WxHxa

Available sizes

W	H	a	Thickness
25	25	25	1.5 - 2 - 2.5 - 3
50	25	25	1.5 - 2 - 2.5 - 3
50	50	25	1.5 - 2 - 2.5 - 3

Another sizes are up on request

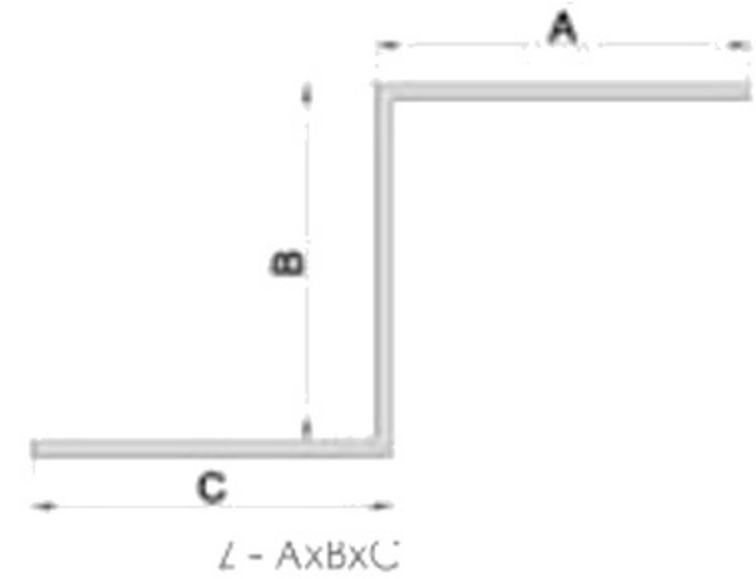


Perforated omega
POA-WxHxa

Z - Channel

Available sizes

A	B	C	Thickness
25	25	25	2 - 2.5 - 3
25	50	25	2 - 2.5 - 3
50	50	50	2 - 2.5 - 3



Solid - Z - channel
SZ - AxBxC

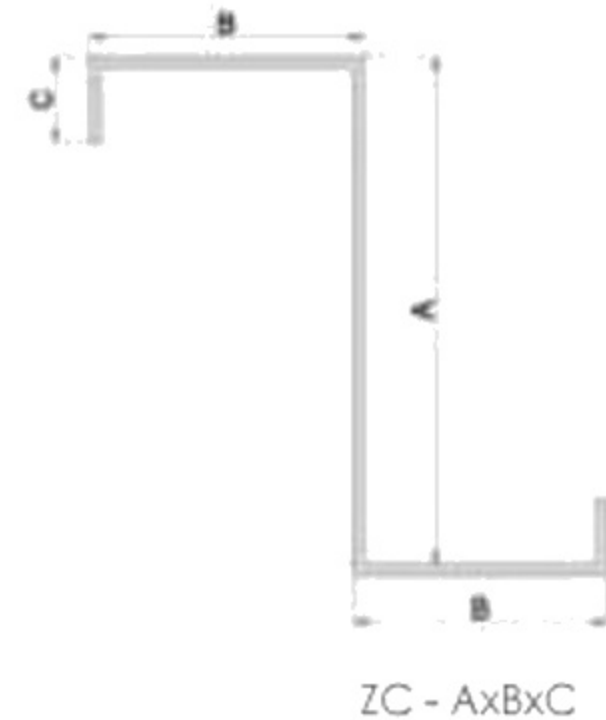


Perforated Z channel
PZ - AxBxC

Z - Channel

Available sizes

A	B	C	Thickness
75	50	15	2 - 2.5 - 3
100	50	15	2 - 2.5 - 3
150	50	15	2 - 2.5 - 3



Solid - Z - channel
SZC - AxBxC

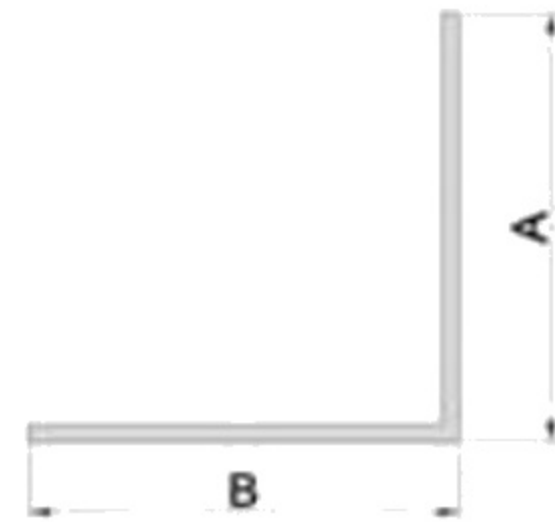


Perforated - Z - channel
PZC - AxBxC

Equal - L - Angle

Available sizes

A	B	thickness
30	30	2 - 2.5 - 3
40	40	2 - 2.5 - 3
50	50	2 - 2.5 - 3
70	70	2 - 2.5 - 3



LA - AxB



Solid equal
SLA - AxB



Perforated equal
PLA - AxB

Un Equal - L - Angle

Available sizes

A	B	thickness
30	60	2 - 2.5 - 3
40	80	2 - 2.5 - 3
50	100	2 - 2.5 - 3



LU - AxB



Solid unequal
SLU - AxB



Perforated unequal
PLU - AxB

I Beam

Material

Steel 37

Finish

Hot dip galvanized after fabrication

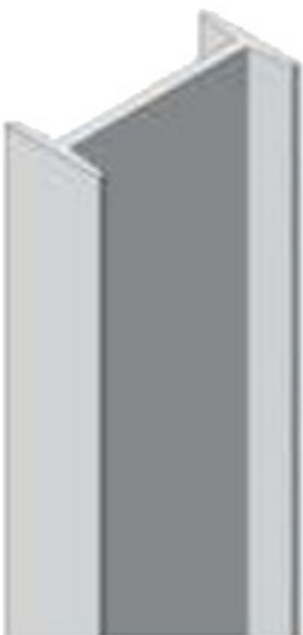
Electro plated Epoxy coated

Available sizes

H	b	Length
100	50	1000- 2000 – 3000 - 6000
80	40	1000- 2000 – 3000 - 6000



I - Hxb



SI - Hxb

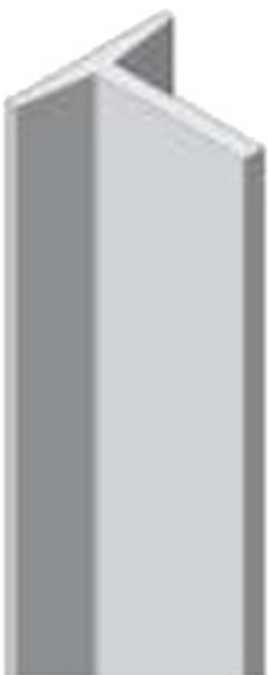


PI - Hxb

T Beam

Available sizes

H	b	Length
40	40	1000- 2000 – 3000 - 6000
80	80	1000- 2000 – 3000 - 6000



accessories

Unistrut accessories

HAII the following accessories beam clamps, plates, angles & base plates have the same properties of C profile support system in Material. Finishes. (ASTM A108 or ASTM A36)

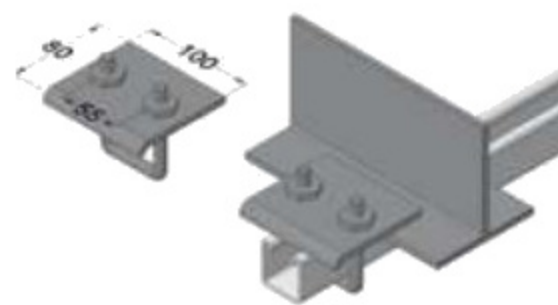
Material

Steel 37
Stainless steel 304 - 304L-316-316L)

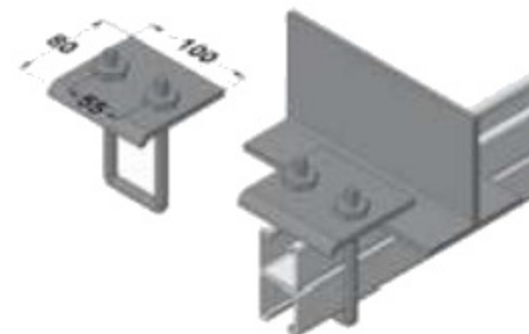
Finish

Hot dip galvanized after fabrication
Electro plated
Electro static coated
Spring nut Electro plated only

Beam Clamps



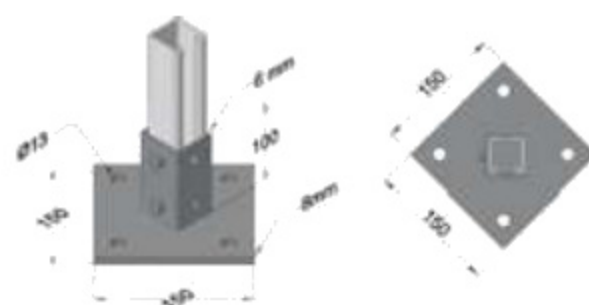
Beam clamp for single channel
(thickness 6-8-10 mm)
(BCSU)



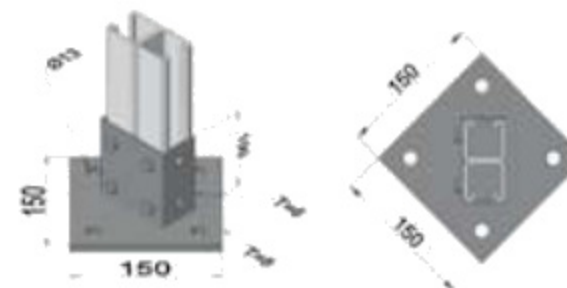
Beam clamp for double channel
(thickness 6-8-10 mm)
(BCDU)

Base Plate

Thickness (6-8-10 mm)



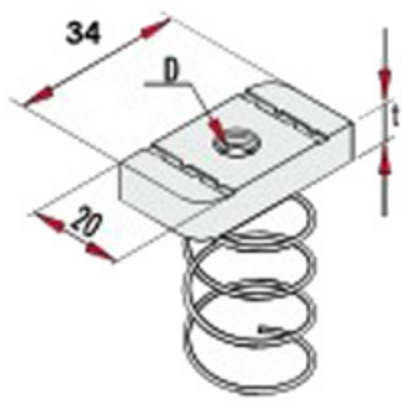
Base plate for single channel
(BPSU)



Base plate for double channel
(BPDU)

Unistrut Fitting

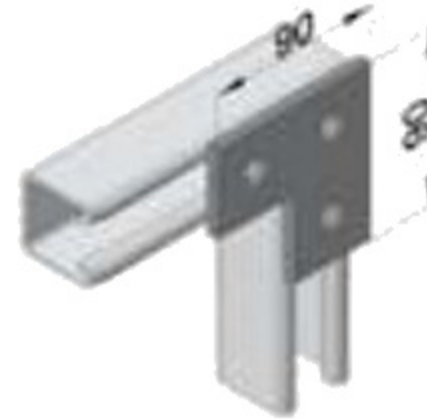
Spring nuts, Plates & angles thickness (6-8-10 mm) according the loading.



Spring nut



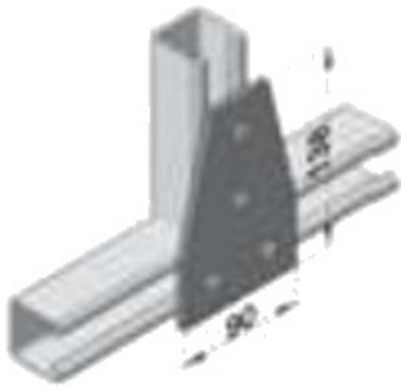
U 1066



U 1036



U 1031



U 1358



U 1026



U 1326



U 1458



U 1325



U 1038



U 1359



U 2095



U 2106



U 2106



U 1045



U 1453



U 1047



U 2224



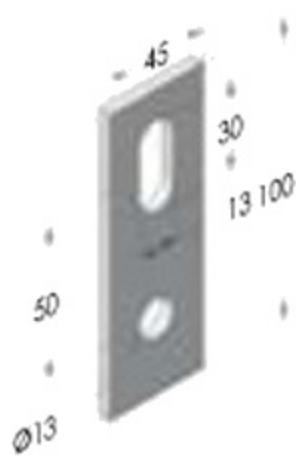
U 2346



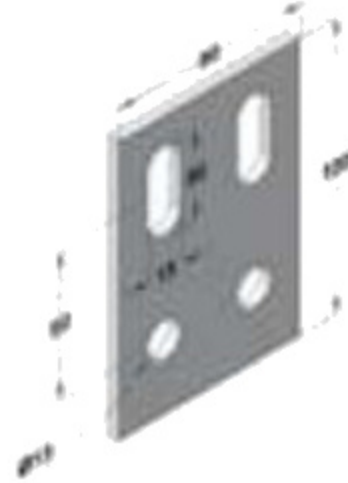
U 2228

U Channel System accessories

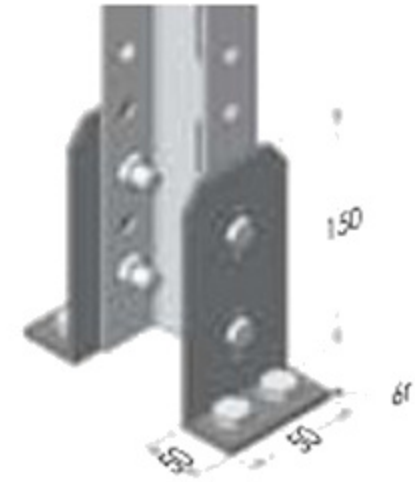
Thickness (2-3-4 mm)



Joint for single channel
90x45 (JSC)



Joint for double channel
90x45 (JDC)



Base plate
(BUC)



Base plate double channel
(BDUC)



Head plate for channel
50X25 (HSUC)



Head plate for double channel
50X25 (HDUC)



Head plate for Angular Chanel
50x25 (HAUC)



Head plate for channel 90X45
HP 90X45



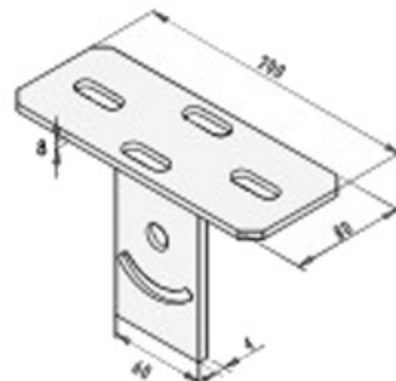
Head plate for channel 90X45
HP2 90X45

I beam System accessories

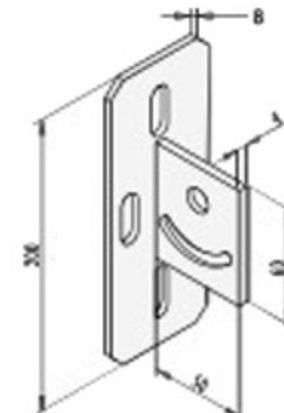
Thickness (4-6-8-10 mm)



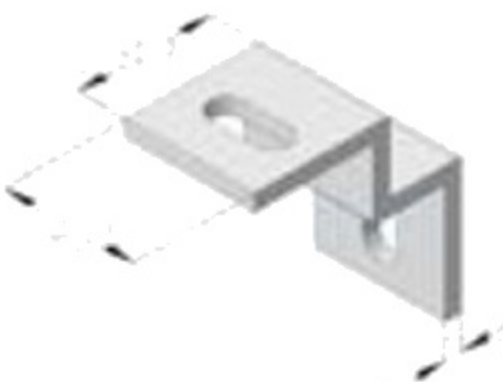
Base plate (IBP)



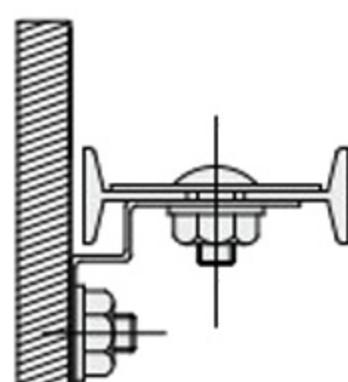
Angular Head plate (AIH)



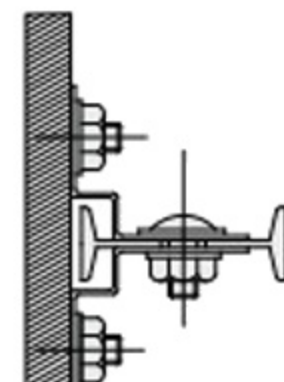
Angular side head plate (AISH)



Single wall angle (ISA)

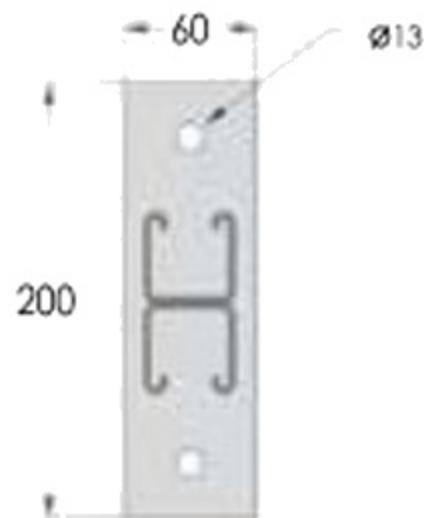


Double wall angle (IDA)



Brackets

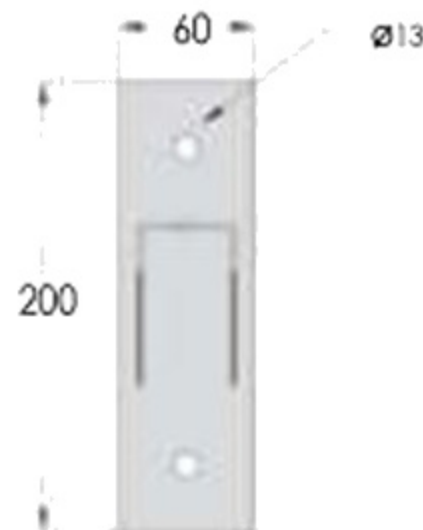
C Profile Bracket (CB)



Channel Length : Cable tray Width + 30 mm
 Channel thickness : 2 mm for tray width (100 to 300)
 2.5mm for tray width(400 to 1000)

Welded plate size : 200 x 60 mm
 Welded plate thickness : 6 mm for tray width (100 to 300)
 8 mm for tray width(400 to 1000)

Wall Bracket with welded plate (WB)



Bracket Length : Cable tray Width + 30 mm
 Welded plate size : 200 x 60 mm

Bracket thickness : 2 mm for tray width (100 to 300)
 3 mm for tray width(400 to 600)
 Welded plate thickness : 6 mm for tray width (100 to 300)
 8 mm for tray width(400 to 600)

I beam bracket (IB)



Bracket Length : Cable tray Width + 30 mm

Bracket thickness : 2 mm for tray width (100 to 300)

U Channel Bracket (UB)



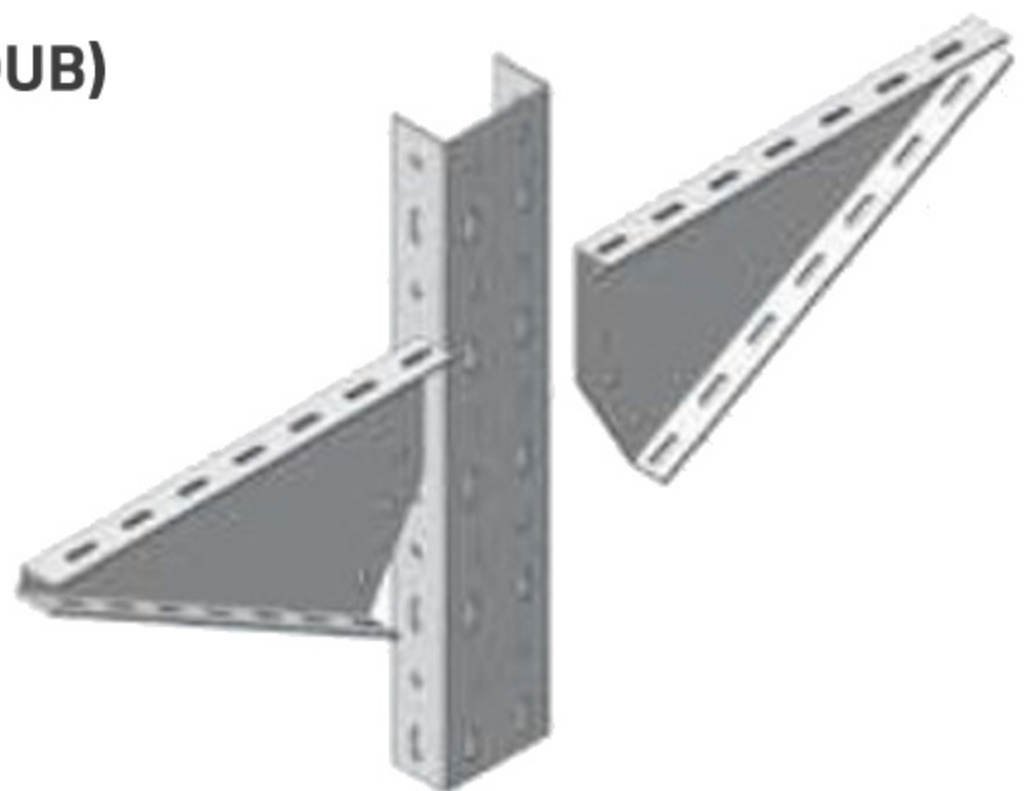
Bracket Length : Cable tray Width + 55 mm
U channel size : 50 x 25 mm , 250 mm length
90 x 45 mm , 250 mm length

Bracket thickness : 2 mm for tray width (100 to 300)
3 mm for tray width (400 to 600)
U channel thickness : 2 mm for tray width (100 to 300)
3 mm for tray width (400 to 600)

Single bracket with U channel 90X45 mm (SUB)



Double bracket with U channel 90x45 mm (DUB)



Wall (L) Bracket (LB)

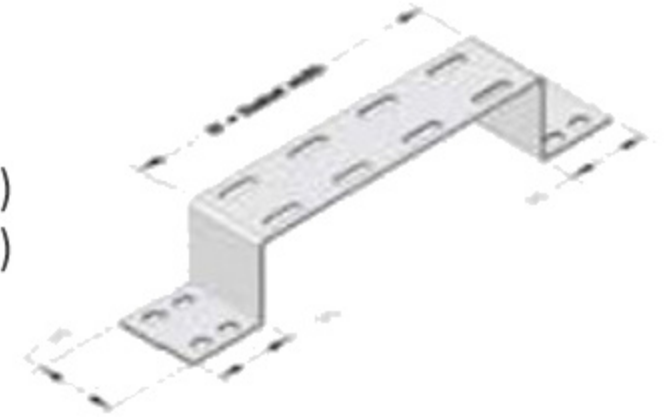
L Bracket size: 150 x100 mm for cable trays size (50-100) mm width
300 x 150 mm for cable trays Size 150 - 200) mm width

L Bracket thickness: 2 mm thickness



Wall Omega (WO)

Omega thickness: 2-mm thickness for cable trays width from (100 to 300 mm)
3-mm thickness for cable trays width from (400 to 600 mm)
4-thickness for cable trays width from (80 to 1000mm)



Ceiling support (CS)



Channel Length : Cable tray Width + 100 mm
Channel thickness : 2 mm for tray width (100 to 300)
3mm for tray width(400 to 1000)

Threaded rod Length: 1000 mm
Threaded rod size : 6 mm for tray width (100 to 200)
8 mm for tray width(300 to 400)
10mm for tray width(500 to 600)
12mm for tray width(up to 1000)

Ceiling hanging support (CH)

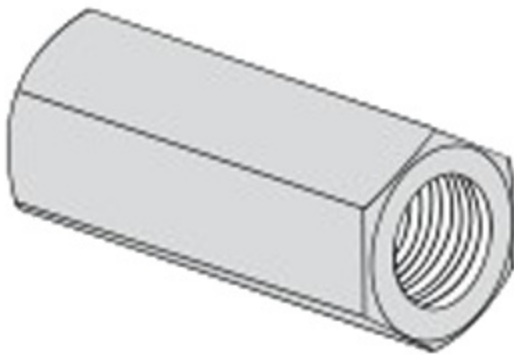
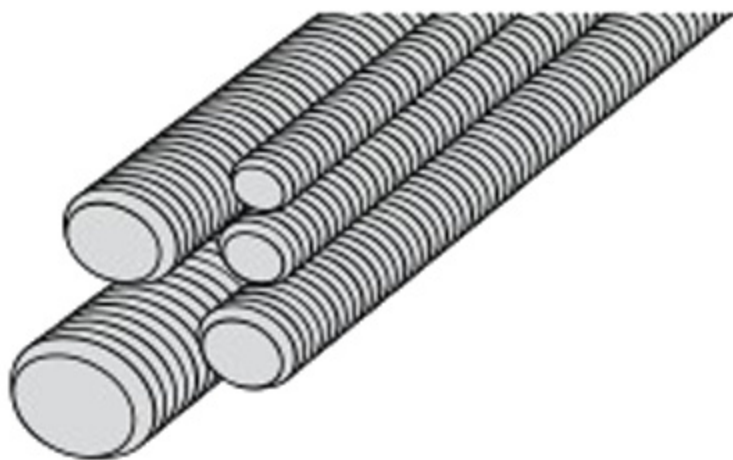
This support for small sizes of cable trays

Cable trays size: (50 - 100 - 150-200) mm width

Threaded rod size: 6-8 mm diameter



Threaded Rod



Threaded rod coupling



Threaded rod nut

Threaded Size	Length (mm)	Pitch	Max Recommended load (KN)
M6	2000	1	3.47
M8	2000	1.25	6.32
M10	2000	1.5	10.02
M12	2000	1.75	14.56
M16	2000	2	24.3
M20	2000	2.5	37.9

Assembly Examples

C Profile support system



(1)



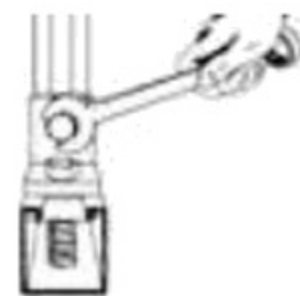
(2)



(3)



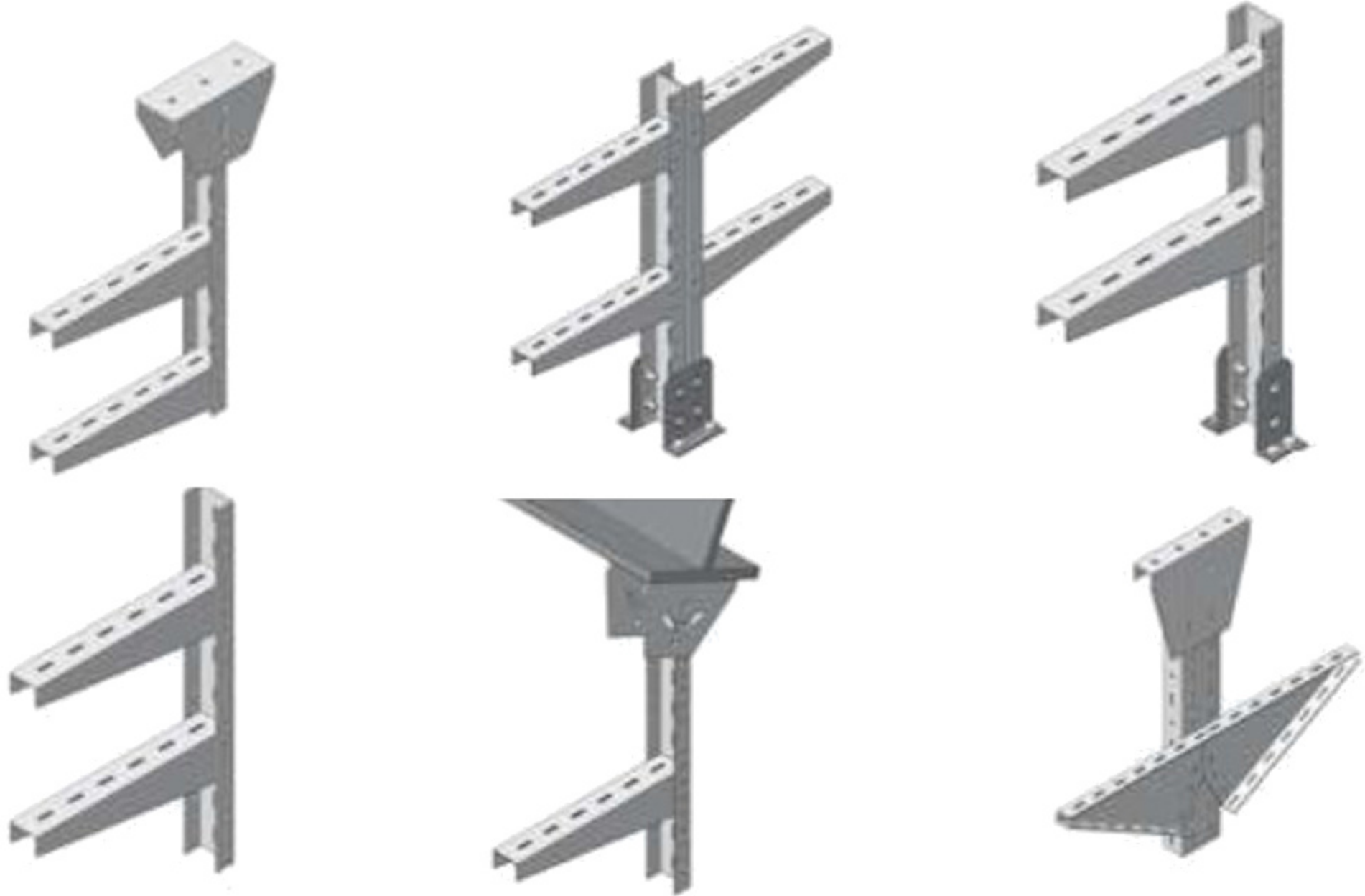
(4)



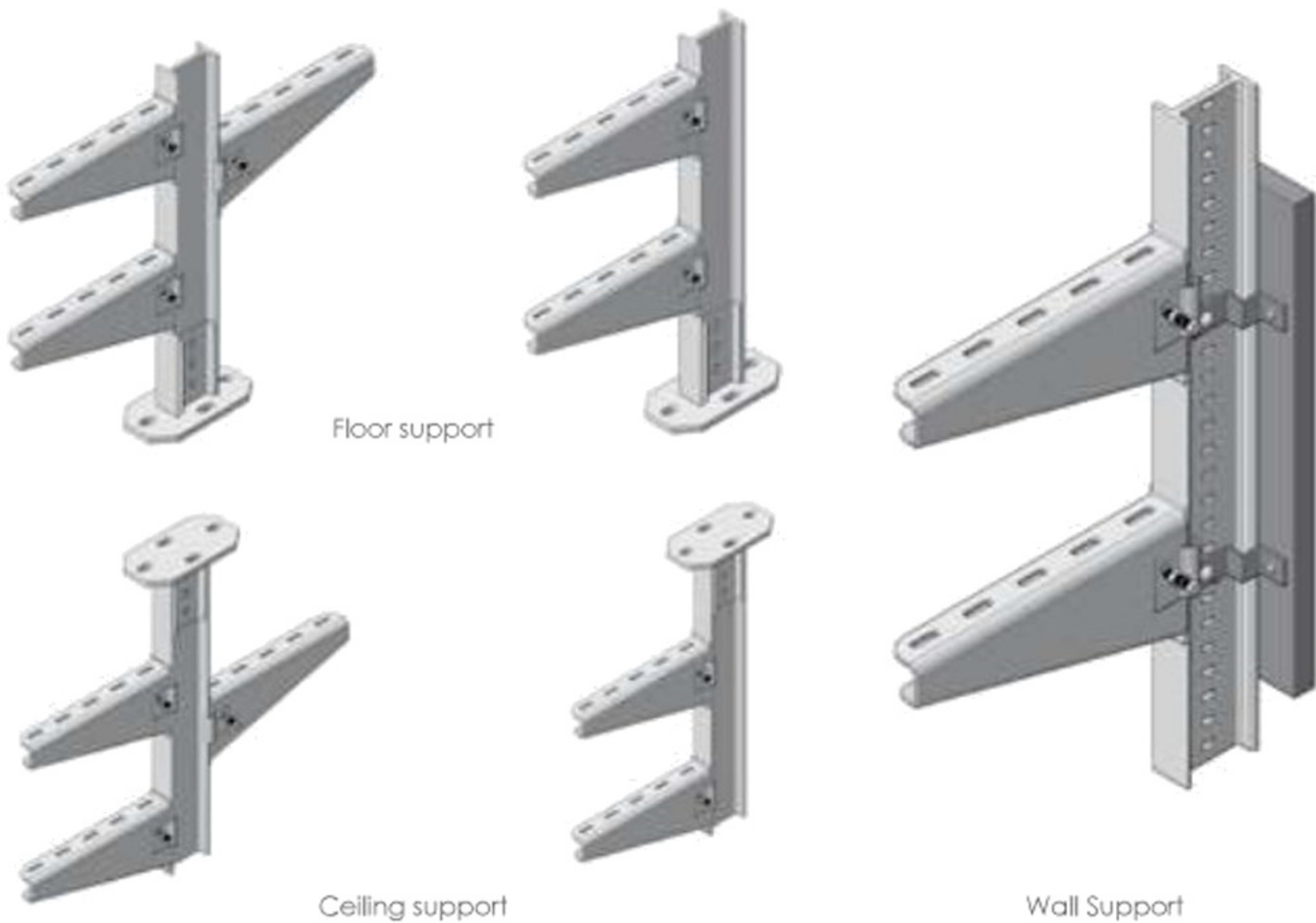
(5)



U Profile support system



I beam support system





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Cable tray perforated



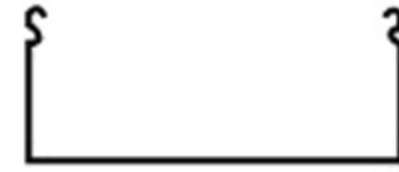
المصرية الألمانية
لتشكيل المعادن



Perforated cable tray

Steel - Stainless steel - Aluminum

Snap on tray (Standard)



Minimum Height = 55 mm
Maximum Height = 125 mm

U shape



Minimum Height = 25mm
Maximum Height = 125 mm

Internal flange



Minimum Height= 40 mm
Maximum Height= 125 mm

External flange



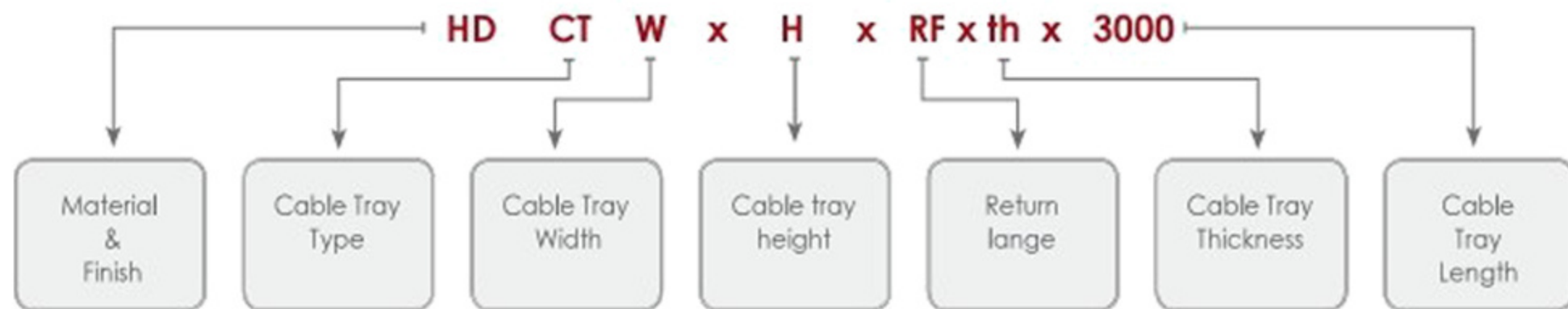
Minimum Height= 40 mm
Maximum Height= 125 mm

* Cable tray width $\geq$ side height.

Manufacture

All cable trays manufactured according to NEMA STANDARED VEL.
We can express about cable tray by the following example:

EX



Material & finish:

Steel 37

HD Hot dip galvanized after fabrication.
PG Pre galvanized
EP Electro plated.
ES Electro static painted.

Stainless steel

SS316 Stain less steel 316
SS316L Stain less steel 316L
SS304 Stain less steel 304
SS304L Stain less steel 304L

Aluminum

AL Aluminum alloy 6063.

Cable tray type:

CT Cable tray perforated type (Snap on tray).
CTU Cable tray perforated U shape.
CTI Cable tray perforated internal flange.
CTE Cable tray external flange.

Cable tray width:

Cable tray width (W) its value varies from 50 mm to 600 mm.

Cable tray height:

Cable tray width (W) its value varies from 50 mm to 600 mm.

Return Flange:

Cable tray return flange standard value is 10 mm.
In case of tray U shape return flange value is 0.

Cable tray thickness:

Cable tray thickness value is from 1 to 2 mm.

Cable tray Length:

Cable tray length standard value is 2000, 3000 mm (6000 mm length is as client required).

Cable tray perforated

(Snap on tray)

Straight Element

Steel - Stainless Steel - Aluminum

- Snap on tray is standard cable tray produced in emeco.
- Standard length 2000 mm - 3000 mm.

Width (W)	Height (H)	Thickness (T)
50	55 to 125	1
100		
200		
300		
400		
500	125	2
600		



Cable trays width 700 to 1000 mm is available with 2 mm thickness up on request.

Example for order

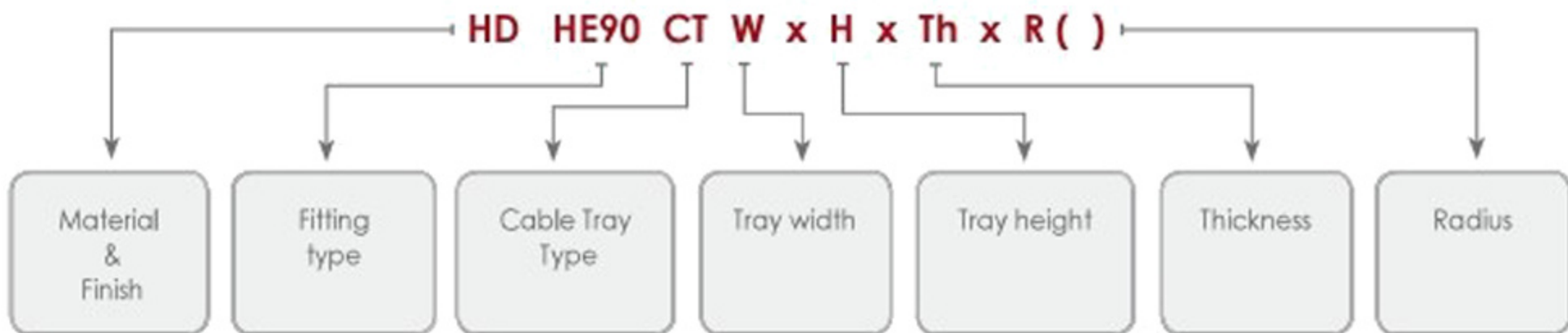
EX: HD CT 300 x 55 x 10 x 1 x 3000

Hot dip galvanized after fabrication cable tray perforated, 300 mm width 55mm side height, 10mm return flange 1mm thickness, 3000 mm length.

Cable tray perforated (Fitting)

Steel - Stainless steel - Aluminum

EX



Fitting type means:

HE90: Horizontal Elbow 90.
 HE45: Horizontal Elbow 45.
 HT: Horizontal Tee.
 HOT: Horizontal offset Tee.
 HC: Horizontal Cross
 HRR: Horizontal Right Reducer.
 HCR: Horizontal Center Reducer.
 HLR: Horizontal Left Reducer.

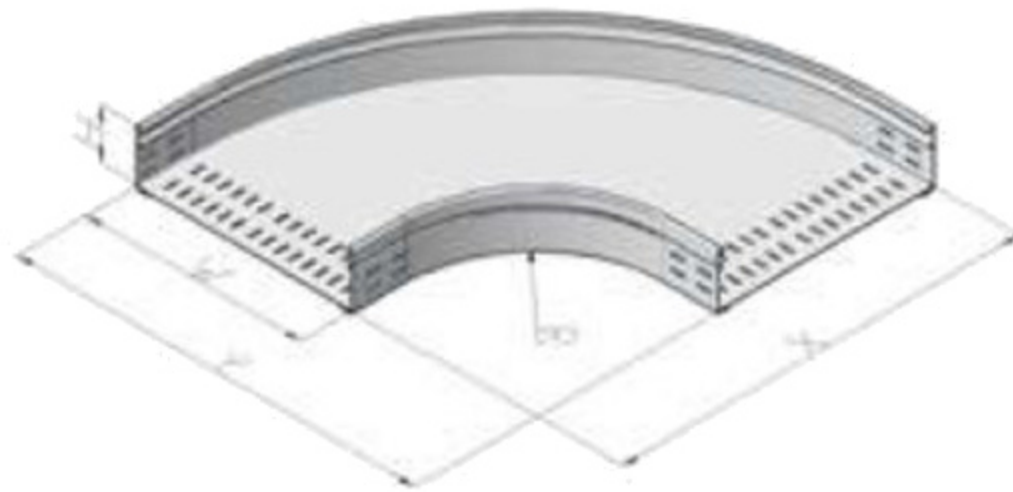
VOE 90 : Vertical Outside elbow 90
 VIE 90 : Vertical Inside elbow 90
 VOE 45: Vertical Outside elbow 45
 VIE 45 : Vertical Inside elbow 45
 VJOE : Vertical Jointed outside elbow
 VJOE: Vertical Jointed Inside elbow
 VT: Vertical Tee

Standard Radius:

- 140 mm for tray width up to 250 mm
- 240 mm for tray width from 300 mm to 1000 mm

HORIZONTAL ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	290	290	140
100		340	340	
200		440	440	
300	To	640	640	240
400	125	740	740	
500		1340	1340	
600		940	940	



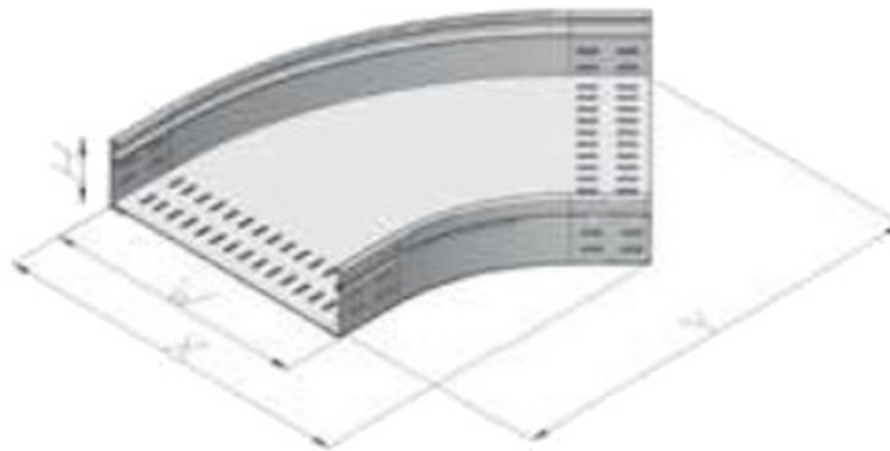
Example for order.

HD HE90 CT300 x 100 x 1.5

Hot dip galvanized after fabrication horizontal Elbow 90° for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

HORIZONTAL ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	305	161	140
100		340	211	
200		411	311	
300	To	552	441	240
400	125	623	541	
500		694	641	
600		764	741	



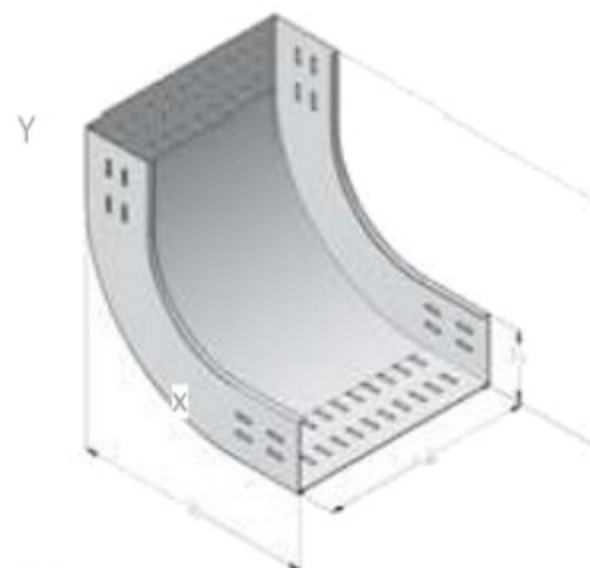
Example for order

PG HE45 CT400 x 90 x 10 x 1.5

Pre galvanized before fabrication horizontal Elbow 45° for cable tray 400 mm width, 90 mm side height, and 10mm return flange, 1.5 mm thickness.

VERTICAL INSIDE ELBOW 90°

Width (W)	Height (H)	X	Y	Radius (R)
50	55	295	295	140
	To	300	300	
	60	330	330	
200	110	350	350	240
	55	495	495	
	To	400	400	
	60	430	430	
600	80	450	450	240
	100	450	450	
	100	450	450	



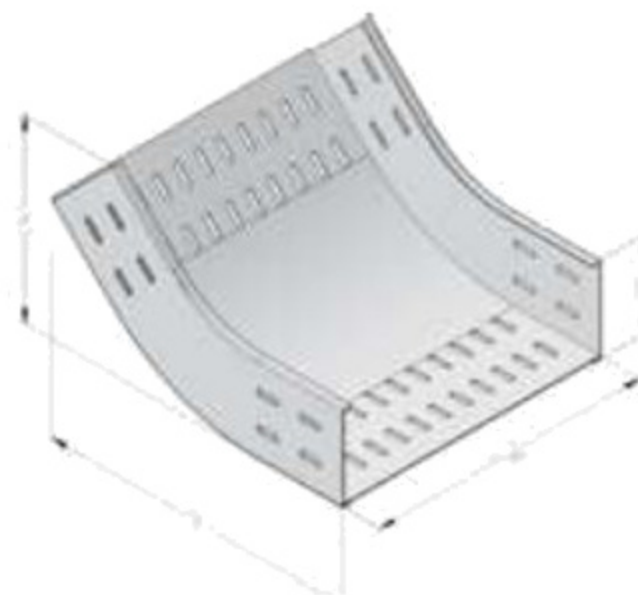
Example for order.

EC VE190 CT200 x 60 x 10 x 1

Electro plated Vertical Elbow inside 90° for cable tray 200 mm width, 60 mm side height, and 10mm return flange, 1 mm thickness.

VERTICAL INSIDE ELBOW 45°

Width (W)	Height (H)	X	Y	Radius (R)
50	55	295	151.7	140
To	60	300	171.7	
	90	320	201.7	
	110	340	221.7	
200	55	395	181	240
To	60	400	201	
	90	420	231	
	110	440	251	



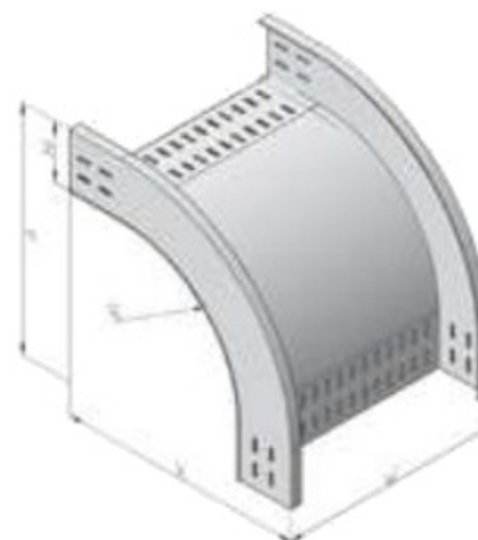
Example for order.

EC VE145 CT200 x 60 x 10 x1

Electro plated Vertical Elbow inside 45° for flange, 1 mm thickness.

VERTICAL OUTSIDE ELBOW 90°

Height (H)	Width (W)	(X)	(Y)	Radius (R)
55	50	295	295	140
60	To	300	300	
90		330	330	
110		350	350	
55	300	495	495	240
60	To	400	400	
80		430	430	
100		450	450	



Example for order.

SS316 VEO90 CT300 x 100 x 10 x1

Stainless steel 316 Vertical Elbow outside 90° for cable tray 300 mm width 100 mm side height, and 10mm return flange, 1 mm thickness.

VERTICAL OUTSIDE ELBOW 45°

Width (W)	Height (H)	X	Y	Radius (R)
50	55	151.7	295	140
To	60	171.7	300	
	90	201.7	320	
	110	221.7	340	
200	55	181	395	240
To	60	201	400	
	90	231	420	
	110	251	440	



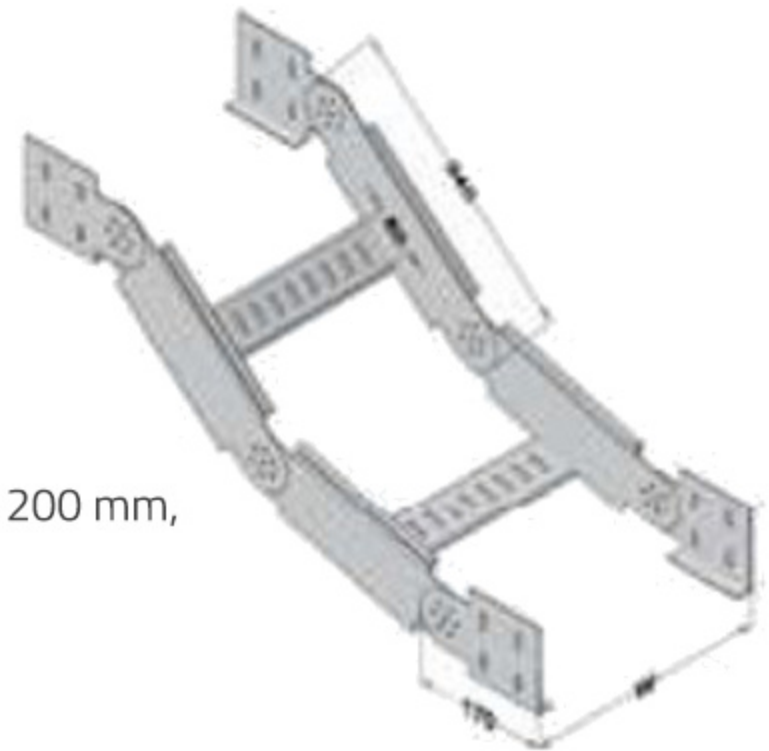
SS316 VEO45 CT300 x 100 x 10 x1

Stainless steel 316 Vertical Elbow outside 45° for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1 mm thickness.

Vertical jointed (Change of level)

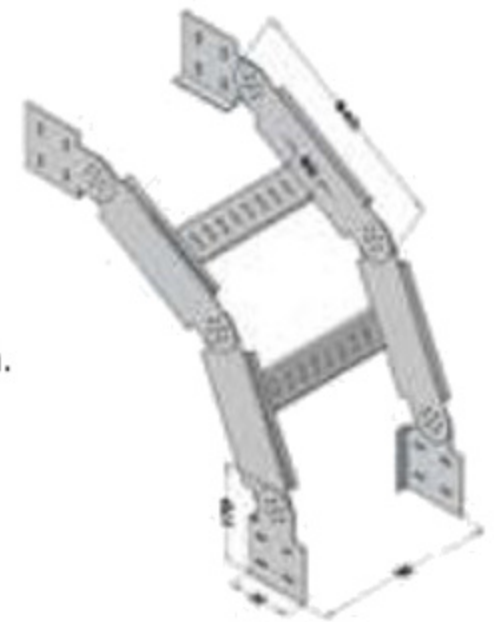
Vertical jointed inside elbow (VJIE)

Ex.
 HD VJIE CT 200x100x10x1.5
 Hot dip galvanized after fabrication Vertical jointed Inside elbow for cable tray width 200 mm,
 side height
 100 mm, 10 mm return flange, 1.5 mm thickness.



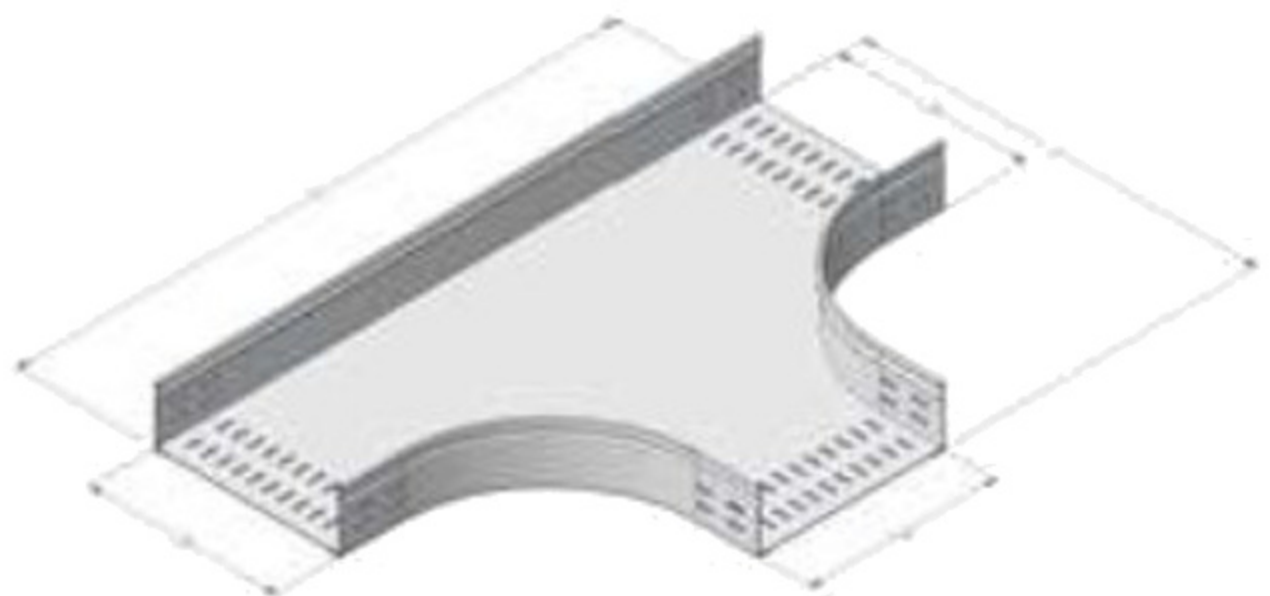
Vertical jointed outside elbow (VJOE)

Ex.
 HD VJOE CT 200x100x10x1.5
 Hot dip galvanized after fabrication Vertical jointed outside elbow for cable tray width 200 mm.
 side height
 100 mm, 10 mm return flange, 1.5 mm thickness.



HORIZONTAL TEE

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	530	290	140
100		580	340	
200		680	440	
300	To	980	640	240
400	125	1080	740	
500		1180	840	
600		1280	940	



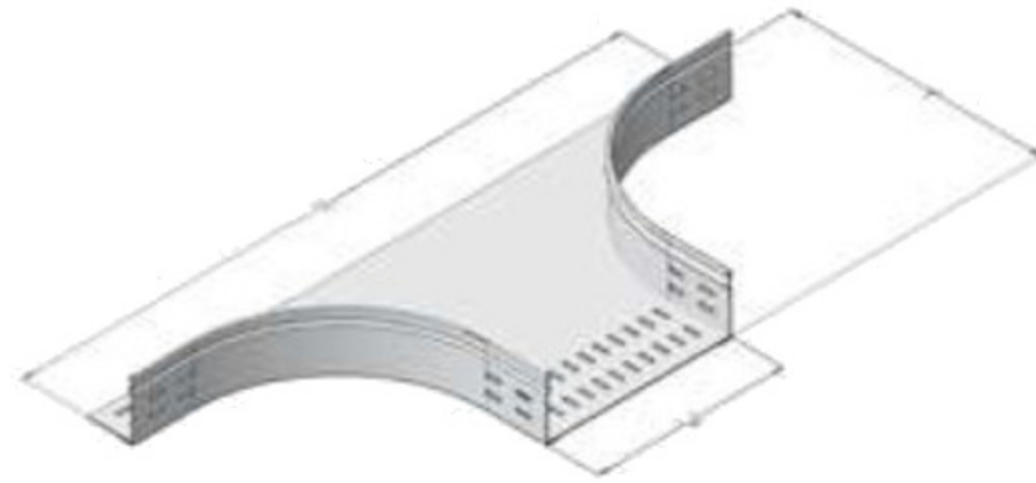
Example for order.
 HD HT CT300 x 100 x 10 x 1.5
 Hot dip galvanized after fabrication horizontal Tee for cable tray 300 mm width, 100 mm side
 height, and
 10mm return flange, 1.5 mm thickness.

HORIZONTAL OFFSET TEE

Example for order.

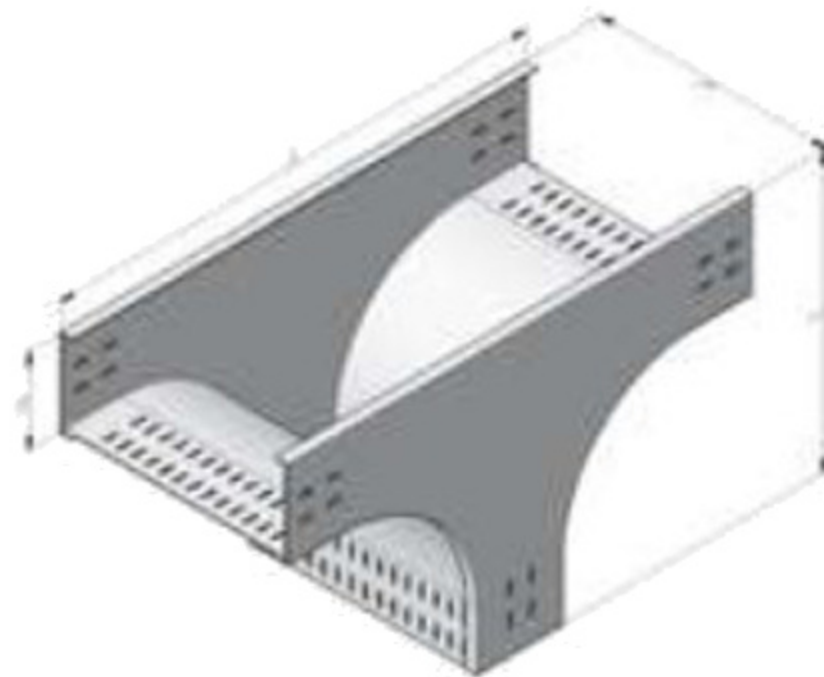
HD HOT 200 x 100 x 10 x1

Hot dip galvanized horizontal offset Tee for tray 200 mm width, 100 mm side height, and 10 mm return flange, 1.5 mm thickness.



VERTICAL TEE

Width (W)	Height (H)	Radius (R)
50	55 To 125	140
100		
200		
300		240
400		
500		
600		



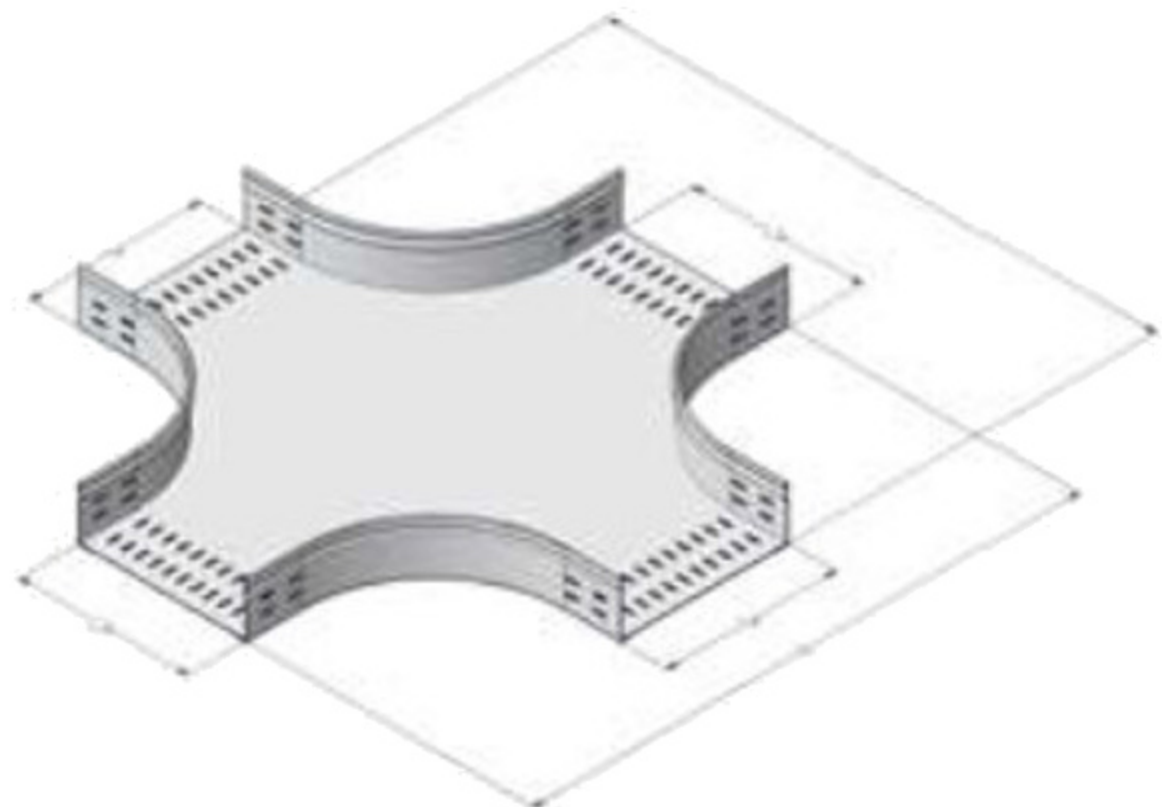
Example for order.

EC VT CT200 x 80 x 10 x1

Electro plated Vertical tee for cable tray 200 mm width 80 mm side height, and 10mm return flange, 1mm thickness.

HORIZONTAL CROSS

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	530	530	140
100		580	580	
200		680	680	
300		980	980	
400	To	1080	1080	240
500	125	1180	1180	
600		1280	1280	



Example for order.

HD HC CT300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Cross for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

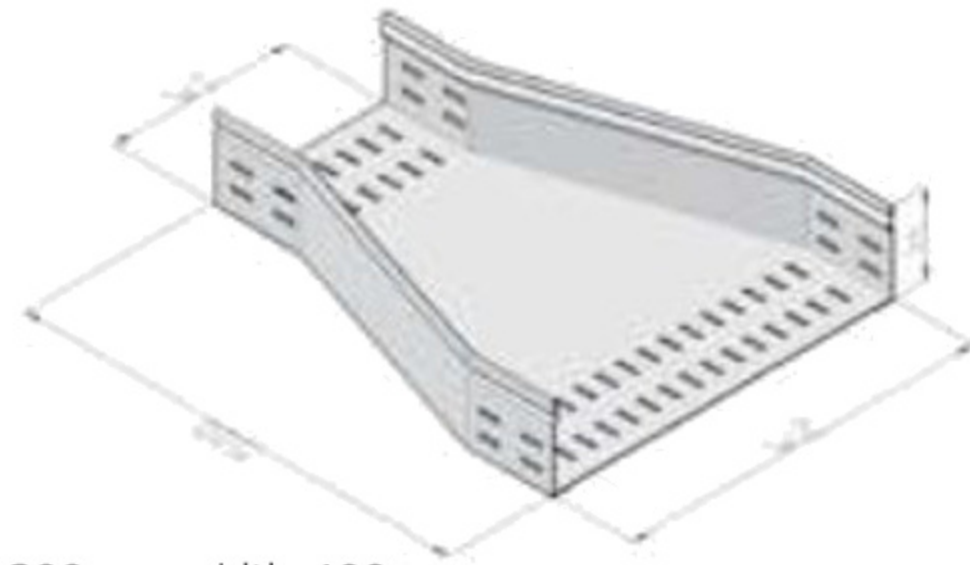
HORIZONTAL REDUCER

CENTER REDUCER

Example for order.

HD HCR CT 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Center reducer for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

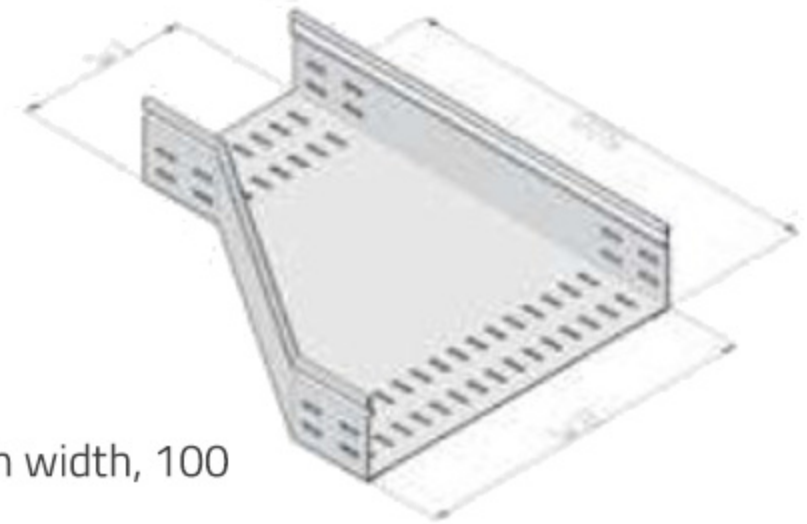


RIGHT HAND REDUCER

Example for order.

HD HLR CT 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Right reducer for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

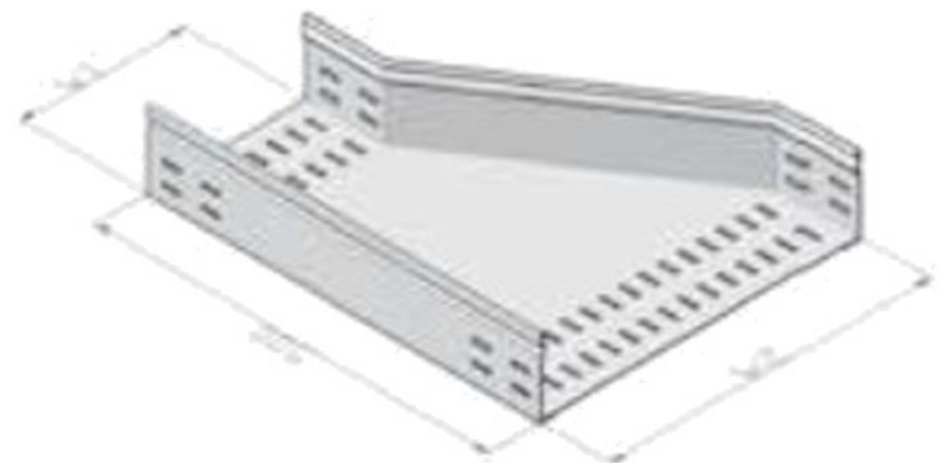


LEFT HAND REDUCER

Example for order.

HD HLR CT 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Left reducer for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.



Cable tray covers

Straight element cover

Steel - Stainless Steel - Aluminum

All properties of cover are the same properties of its tray.
Standard length is 2000, 3000 mm.



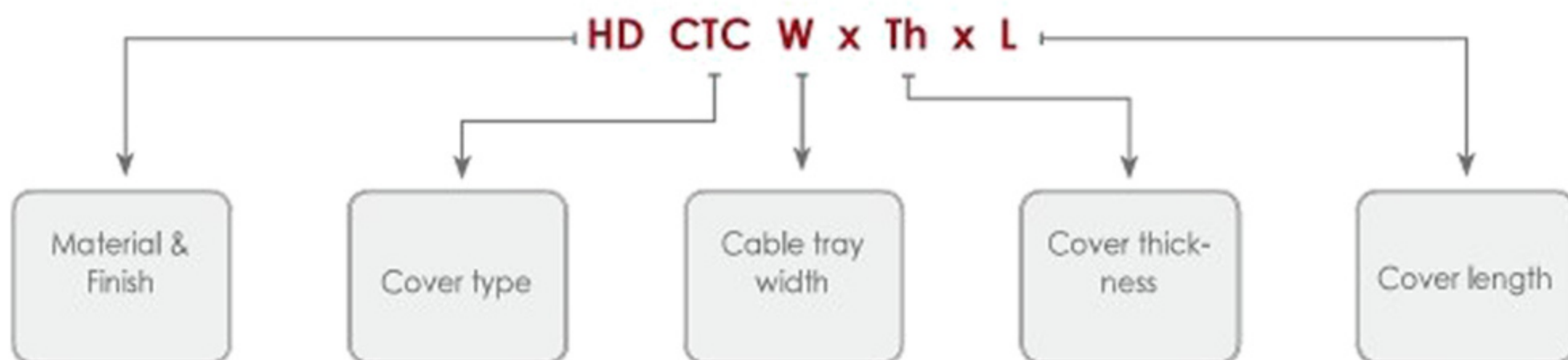
(CTC) Snap on cover
(standard)



(CTPC)
Pyramid Shape cover



(CTUC)
U Shape cover



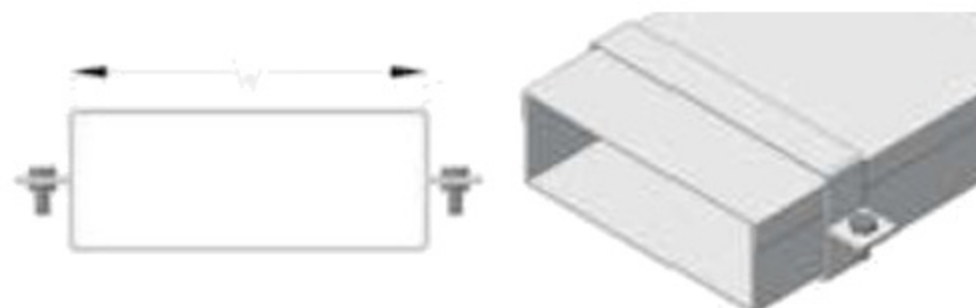
Example for order

HD CTC 300X1X3000

Hot dip galvanized after fabrication cover for cable tray 300 mm width 1 mm thickness, 3000 mm length.

Available sizes of cover

EMECO Description	Width (W)	Thickness (T)
cover 50	50	1 To 2
cover100	100	
cover200	200	
cover300	300	
cover 400	400	
cover 500	500	
cover 600	600	



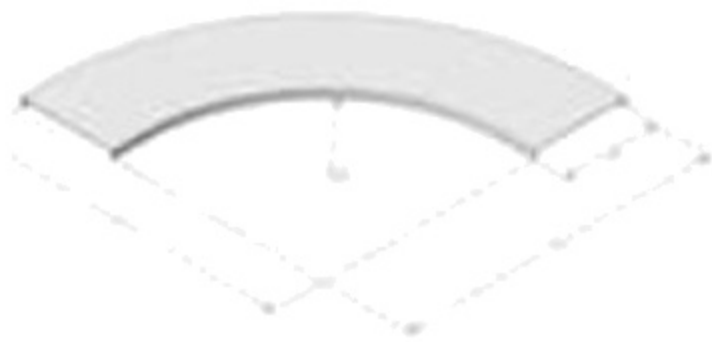
Cover clamp for fixing U
shape cover

Cable trays cover width 700 to 1000 mm is available with 2 mm thickness on request.

Fitting Covers

Steel - Stainless Steel - Aluminum

All properties of cover are the same of its cover of straight element.



Horizontal elbow 90° cover
(HE90CTC)



Horizontal elbow 45° cover
(HE45CTC)



Vertical inside elbow 90° cover
(VIE90CTC)



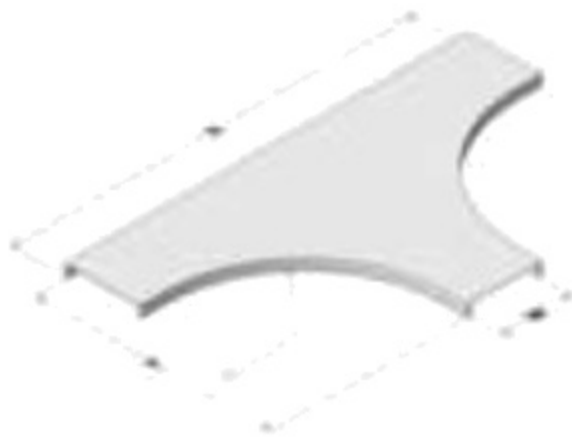
Vertical inside elbow 45° cover
(VIE45CTC)



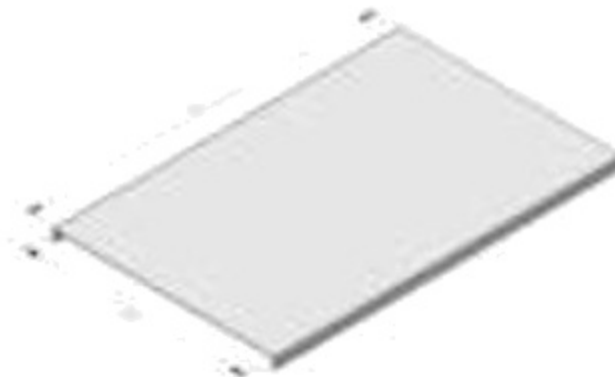
Vertical outside elbow 90° cover
(VOE90CTC)



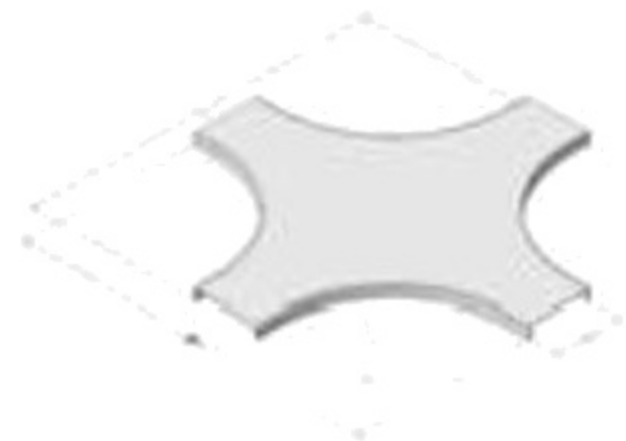
Vertical outside elbow 45° cover
(VOE45CTC)



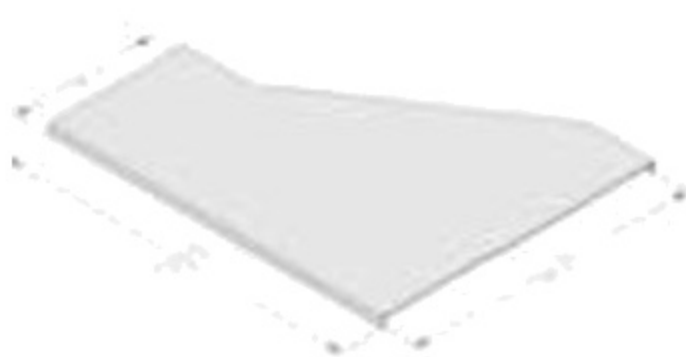
Horizontal Tee cover
(HTCTC)



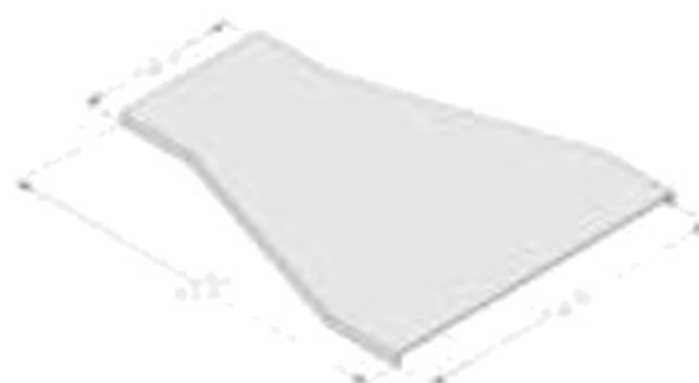
Vertical Tee cover
(VTCTC)



Horizontal Cross cover
(HCCTC)



Horizontal Left Reduce cover
(HLRCTC)



Horizontal Center Reduce cover
(HCRCTC)



Horizontal Right Reduce cover
(HRRCTC)

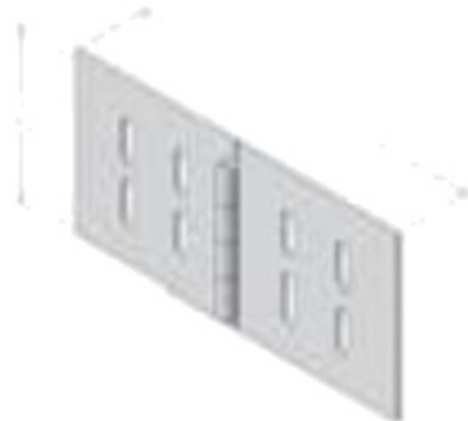
Accessories

Steel - Stainless Steel - Aluminum

All properties of cover are the same of its cover of straight element.



Splice plate
(CTSP)



Horizontal Adjustable joint
(CT HAJ)



Vertical Adjustable joint
(CT VAJ)



Center Reducing splice plate
(CT CRSP)



Right Reducing splice plate
(CT CRSP)



Lift Reducing splice plate
(CT CRSP)



Blind end
(CT BE)



Straight element Separator
(CT SPP)



Horizontal Elbow Separator
(CT HSEP)



Vertical inside Separator
(CT VISEP)



Vertical outside Separator
(CT VOSEP)



Steel bolt with nut & washer



المصرية الألمانية
لتشكيل المعادن

Cable tray duct



المصرية الألمانية
لتشكيل المعادن

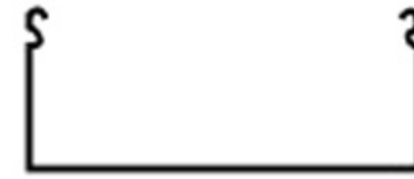


Closed cable tray (Duct)

Straight Element

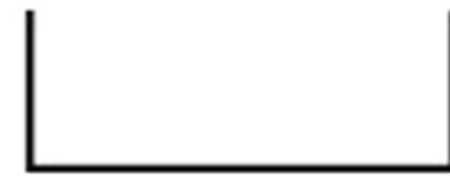
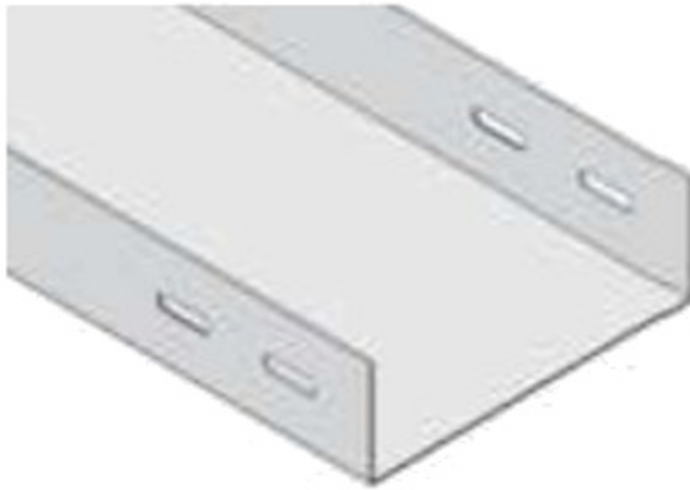
Steel - Stainless steel - Aluminum

Snap on tray (Standard)



Minimum Height = 55 mm
Maximum Height = 125 mm

U shape



Minimum Height = 25mm
Maximum Height = 125 mm

Internal flange



Minimum Height= 40 mm
Maximum Height= 125 mm

External flange

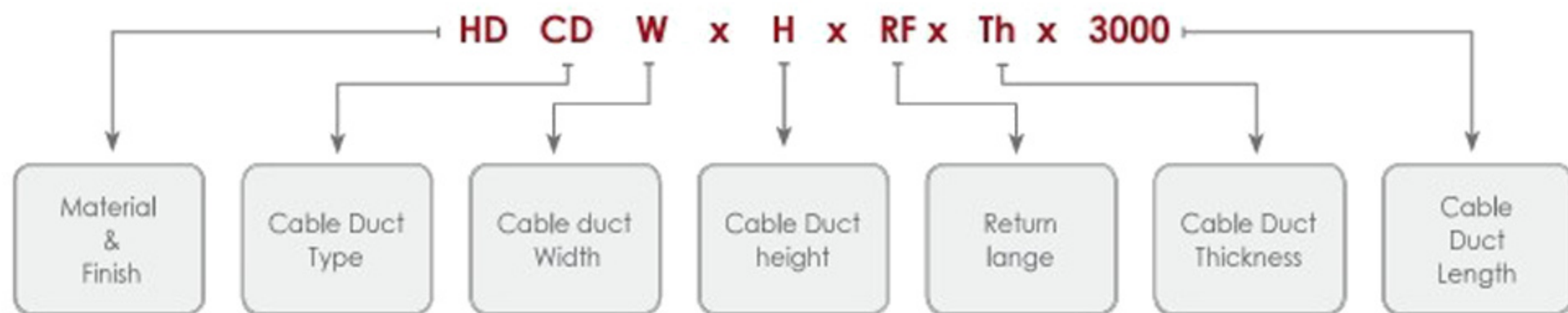


Minimum Height= 40 mm
Maximum Height= 125 mm

Manufacture

We can express about cable Duct by the following example.

EX



Material & finish:

Steel 37

HD Hot dip galvanized after fabrication.
 PG Pre galvanized
 EP Electro plated
 ES Electrostatic painted.

Stainless steel

SS316 Stain less steel 316
 SS316L Stain less steel 316L
 SS304 Stainless steel 304
 SS304L Stain less steel 304L

Aluminum

AL Aluminum alloy 6063.

Cable Duct type:

CD Cable Duct type (Snap on Duct).
 CDU Cable Duct U shape.
 CDI Cable Duct internal flange.
 CDE Cable Duct external flange.

Cable Duct width:

Cable Duct width (W) its value varies from 50 mm to 600 mm.

Cable Duct height:

Cable Duct height (H) standard value snap on Duct = 55 mm to 125 mm.

Return Flange:

Cable Duct return flange standard value is 10 mm.
 In case of Duct Ushape return flange value is 0.

Cable Duct thickness:

Cable Duct thickness value is from 1 to 2 mm.

Cable Duct Length:

Cable Duct length standard value is 2000, 3000 mm (6000 mm length is as client required).

Cable tray Closed

(Snap on Duct)

Straight Element

Steel - Stainless Steel - Aluminum

- Snap on tray is standard cable tray produced in emeco.
- Standard length 2000 mm-3000 mm.

Width (W)	Height (H)	Thickness (T)
50	55 to 125	1 to 2
100		
200		
300		
400		
500		
600		



Cable trays width 700 to 1000 mm is available with 2 mm thickness up on request.

Example for order

EX: HD CD 200 x 100 x 10 x 1.5 x 3000

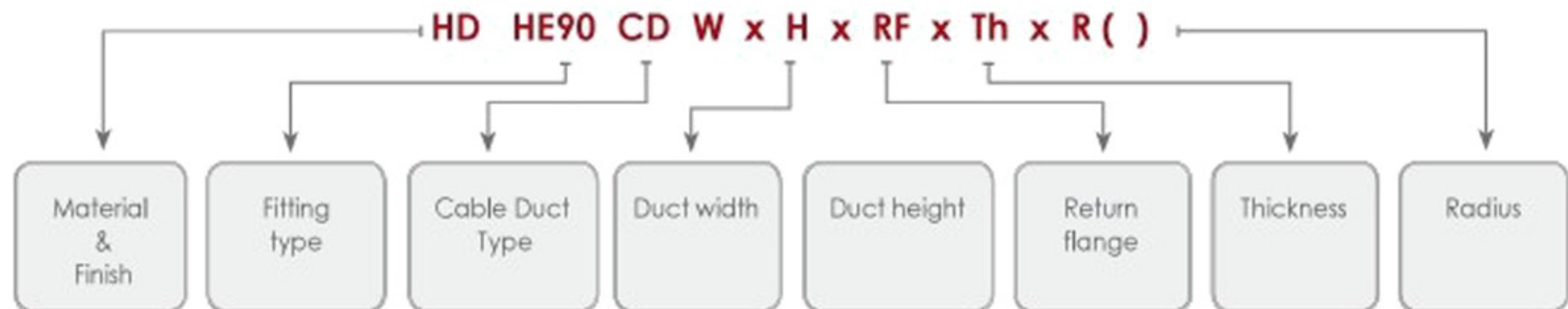
Hot dip galvanized after fabrication cable trayDuct type, 200 mm width, 100mm side height, 10 mm return flang 1.5mm thickness, 3000 mm length.

Cable duct (Fitting)

Steel - Stainless steel - Aluminum

All Cable duct fitting has the same properties of its cable duct in (size - thickness - finish).

EX



Fitting type means:

HE90: Horizontal Elbow 90.

HE45: Horizontal Elbow 45.

HT: Horizontal Tee.

HOT: Horizontal offset Tee.

HC: Horizontal Cross

HRR: Horizontal Right Reducer.

HCR: Horizontal Center Reducer.

HLR: Horizontal Left Reducer.

VOE 90 : Vertical Outside elbow 90

VIE 90 : Vertical Inside elbow 90

VOE 45: Vertical Outside elbow 45

VIE 45 : Vertical Inside elbow 45

VJOE : Vertical Jointed outside elbow

VJOE: Vertical Jointed Inside elbow

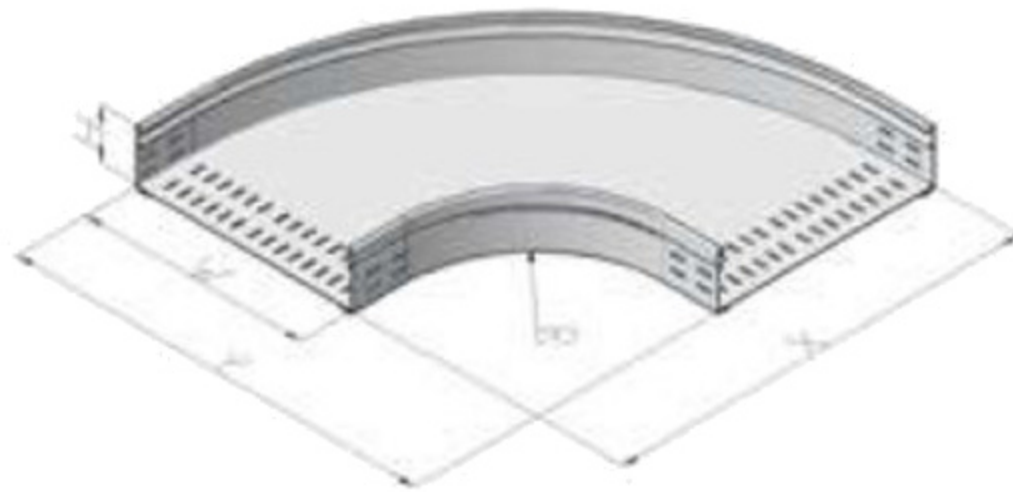
VT: Vertical Tee

Standard Radius:

- 140 mm for tray width up to 250 mm
- 240 mm for tray width from 300 mm to 1000 mm

HORIZONTAL ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	290	290	140
100		340	340	
200		440	440	
300	To	640	640	240
400	125	740	740	
500		1340	1340	
600		940	940	

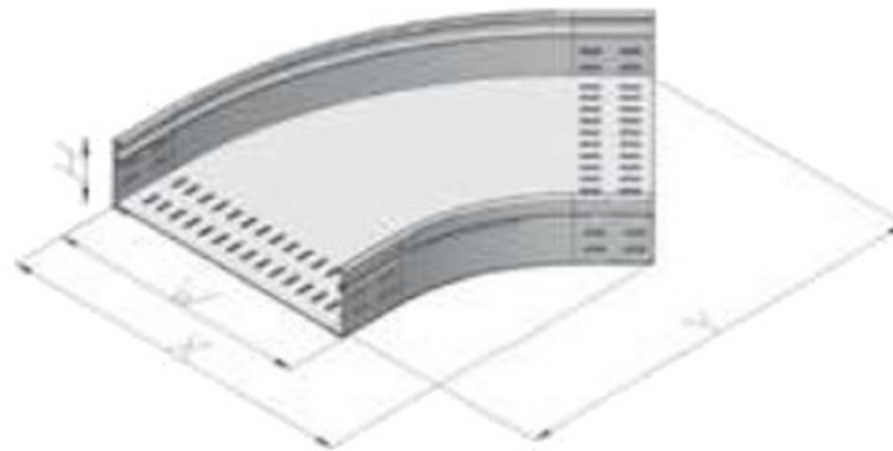


HD HE90 CD 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Elbow 90° for cable duct 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

HORIZONTAL ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	305	161	140
100		340	211	
200		411	311	
300	To	552	441	240
400	125	623	541	
500		694	641	
600		764	741	



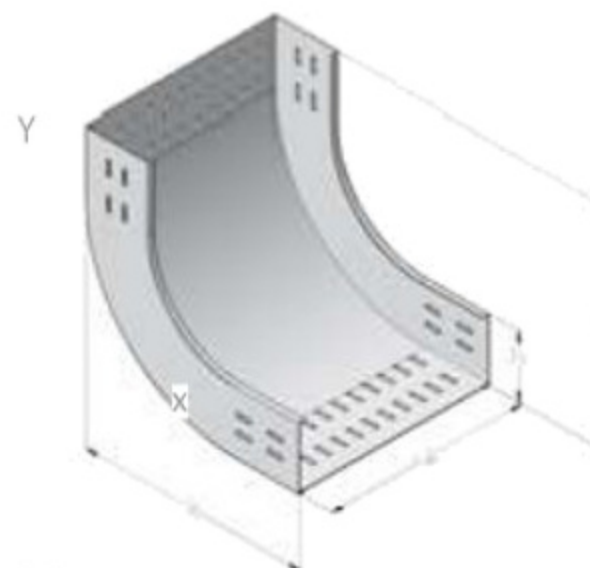
Example for order

PG HE45 CD 400 x 90 x 10 x1.5

Pre galvanized horizontal Elbow 45° for cable duct 400 mm width, 90 mm side height, and 10mm return flange, 1.5 mm thickness.

VERTICAL INSIDE ELBOW 90°

Width (W)	Height (H)	X	Y	Radius (R)
50	55	295	295	140
	To	300	300	
	60	330	330	
200	110	350	350	240
	55	495	495	
	To	400	400	
	60	430	430	
300	80	430	430	240
	100	450	450	
	600	450	450	



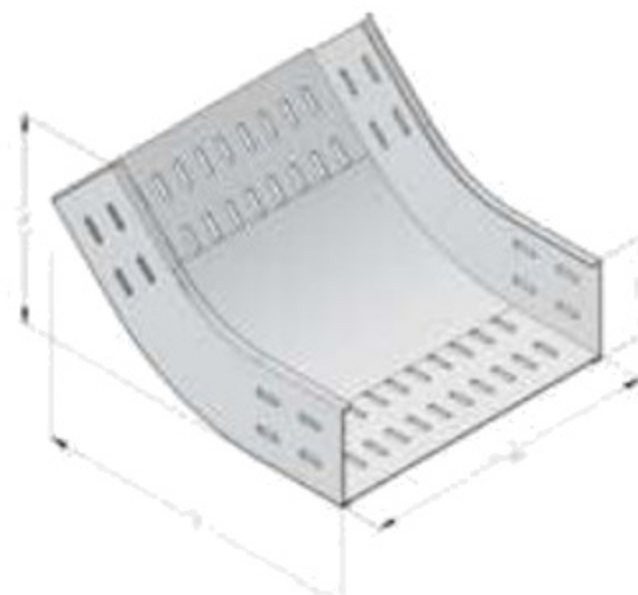
Example for order,

EC VE190 CD 200 x 60 x 10 x1

Electro plated Vertical Elbow inside 90° for cable duct 200 mm width, 60 mm side height, and 10mm return flange, 1 mm thickness.

VERTICAL INSIDE ELBOW 45°

Width (W)	Height (H)	X	Y	Radius (R)
50	55	295	151.7	140
To	60	300	171.7	
	90	320	201.7	
	110	340	221.7	
200	55	395	181	240
To	60	400	201	
	90	420	231	
	110	440	251	



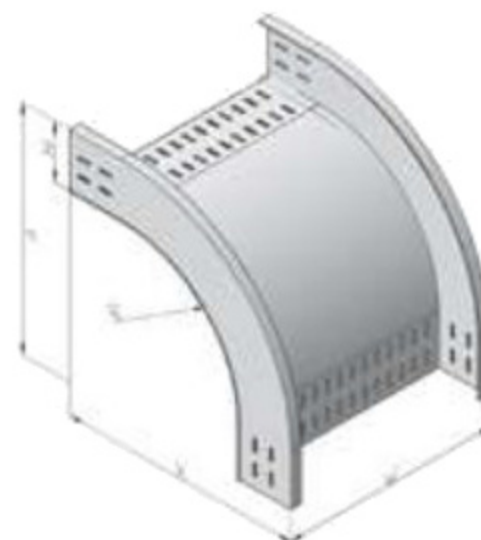
Example for order.

EC VE45 CD 200 x 60 x 10 x1

Electro plated Vertical Elbow inside flange, 1 mm thickness.

VERTICAL OUTSIDE ELBOW 90°

Height (H)	Width (W)	(X)	(Y)	Radius (R)
55	50	295	295	140
60	To	300	300	
90		330	330	
110		350	350	
55	300	495	495	240
60	To	400	400	
80		430	430	
100		450	450	



Example for order.

SS316 VEO90 CD 300 x 100 x 10 x1

Stainless steel 316 Vertical Elbow outside 90° for cable duct 300 mm width, 100 mm side height, and 10mm return flange, 1 mm thickness.

VERTICAL OUTSIDE ELBOW 45°

Width (W)	Height (H)	X	Y	Radius (R)
50	55	151.7	295	140
To	60	171.7	300	
	90	201.7	320	
	110	221.7	340	
200	55	181	395	240
To	60	201	400	
	90	231	420	
	110	251	440	



SS316 VE045 CD 300 x 100 x 10 x1

Stainless steel 316 Vertical Elbow outside 45° for cable duct 300 mm width 100 mm side height, and 10mm return flange, 1 mm thickness.

Vertical jointed (Change of level)

Vertical jointed inside elbow

HD VJIE CT 200x100x10x1.5

Hot dip galvanized after fabrication Vertical jointed inside elbow for cable Duct width 200 mm , side height

100 mm, 10 mm return flange. 1.5 mm thickness.



Vertical jointed outside elbow

Ex.

HD VJOE CT 200x100x10x1.5

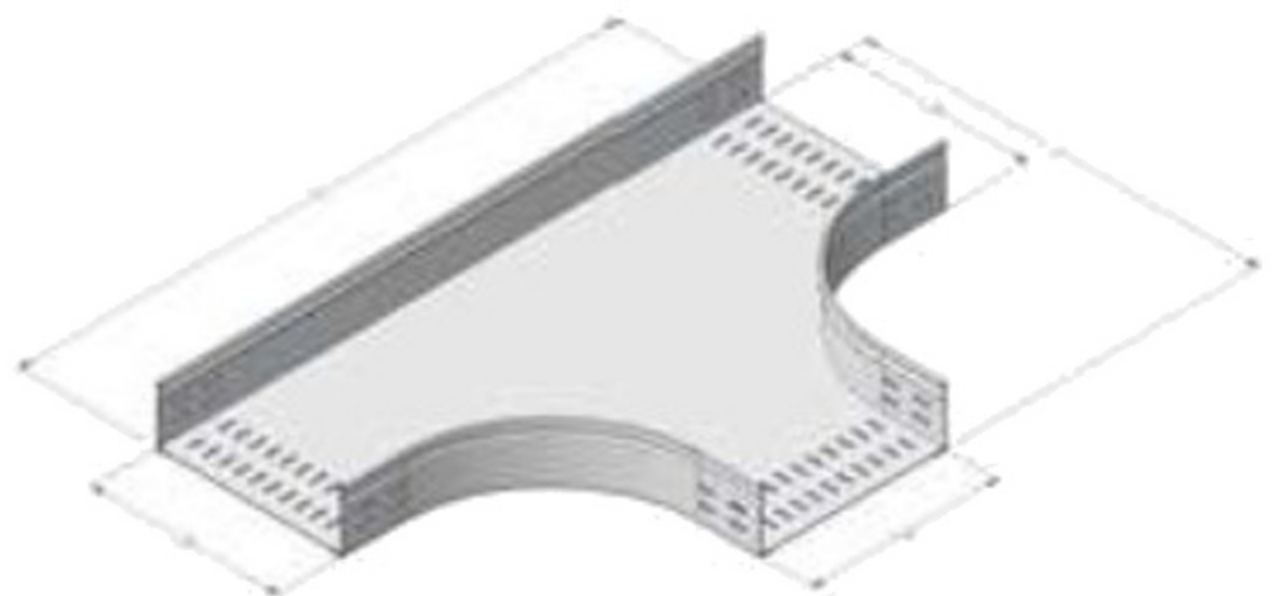
Hot dip galvanized after fabrication Vertical jointed outside elbow for cable tray width 200 mm side height

100 mm, 10 mm return flange, 1.5 mm thickness.



HORIZONTAL TEE

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	530	290	140
100		580	340	
200		680	440	
300	To	980	640	240
400	125	1080	740	
500		1180	840	
600		1280	940	



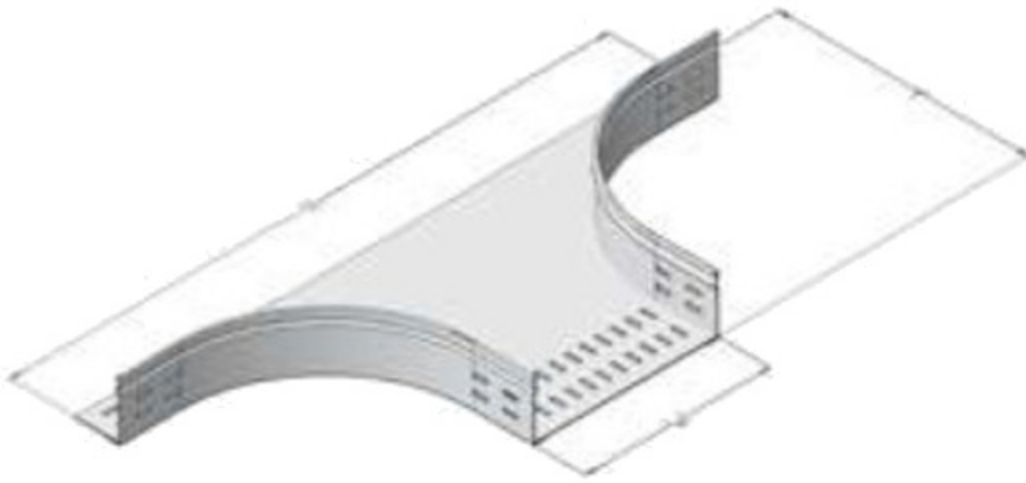
Example for order.

HD HT CD 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Tee for cable duct 300 mm width, 100 mm side height, and

10mm return flange, 1.5 mm thickness.

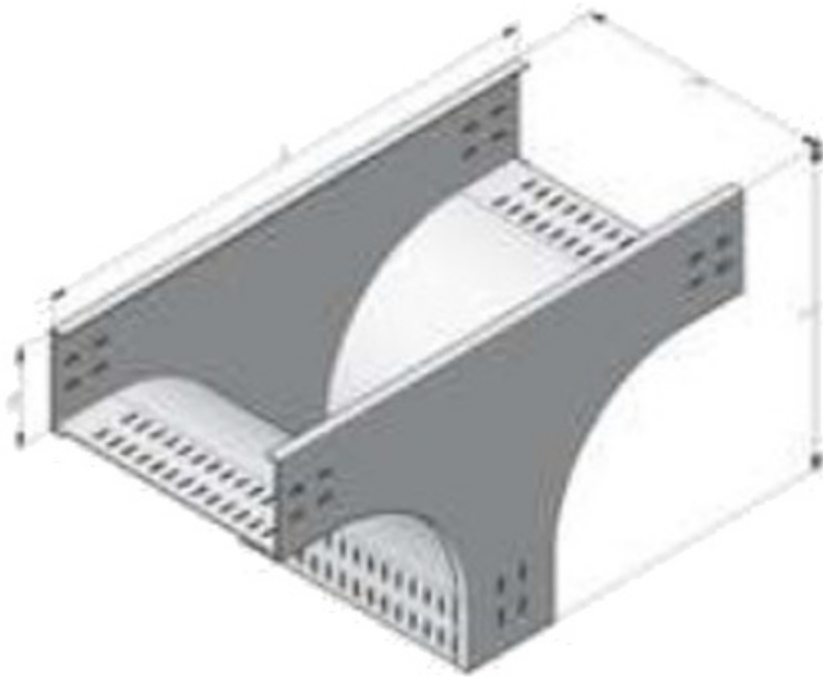
HORIZONTAL OFFSET TEE



Example for order
HD HOT 200 x 100 x 10 x1.5
Hot dip galvanized after fabrication horizontal offset Tee for cable Duct 200 mm width, 100 mm side height,
and 10 mm return flange, 1.5 mm thickness.

VERTICAL TEE

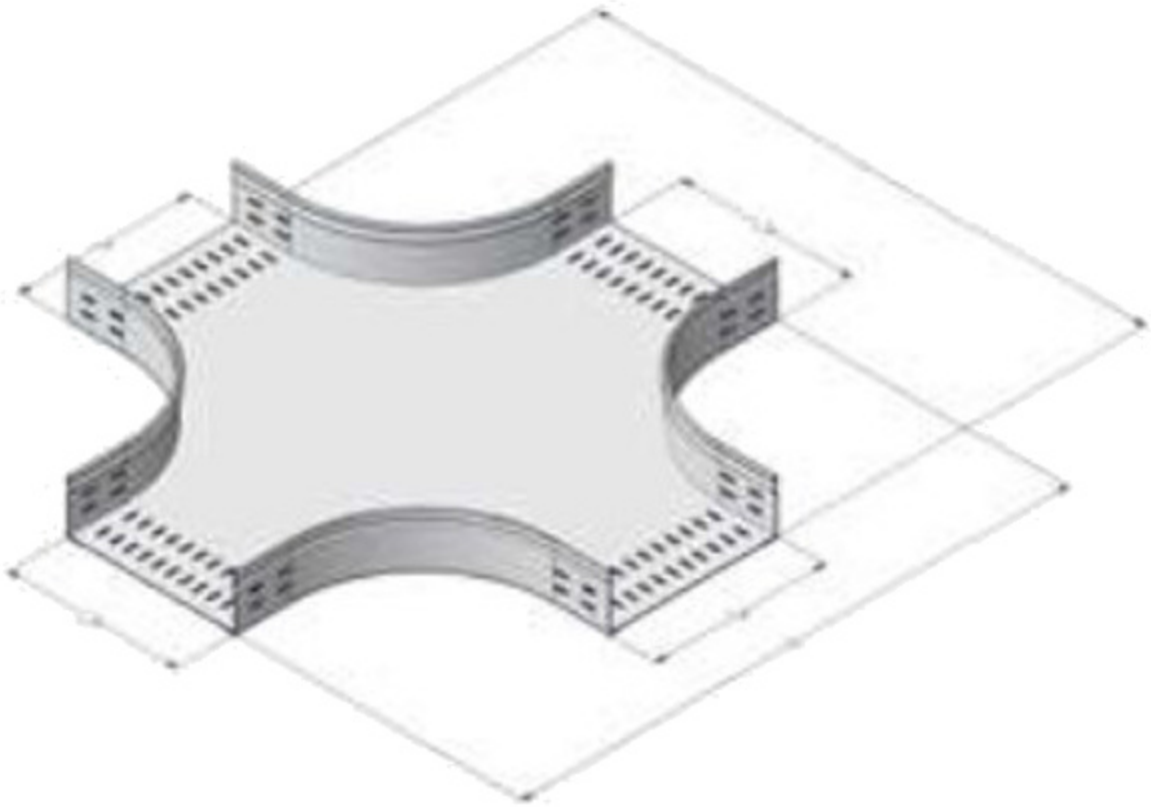
Width (W)	Height (H)	Radius (R)
50	55 To 125	140
100		
200		
300		240
400		
500		
600		



Example for order.
EC VT CD 200 x 80 x 10 x1
Electro plated Vertical tee for cable duct 200 mm width, 80 mm side height, and 10mm return flange, 1mm thickness.

HORIZONTAL CROSS

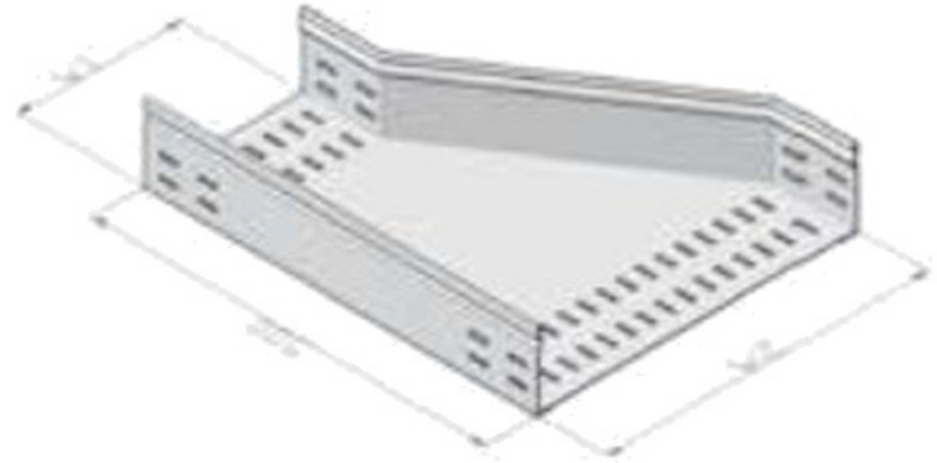
Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	55	530	530	140
100		580	580	
200		680	680	
300	To	980	980	240
400	125	1080	1080	
500		1180	1180	
600		1280	1280	



Example for order.
HD HC CD 300 x 100 x 10 x1.5
Hot dip galvanized after fabrication horizontal Cross for cable duct 300 mm width, 100 mm side height, and
10mm return flange, 1.5 mm thickness.

HORIZONTAL REDUCER

LEFT HAND REDUCER

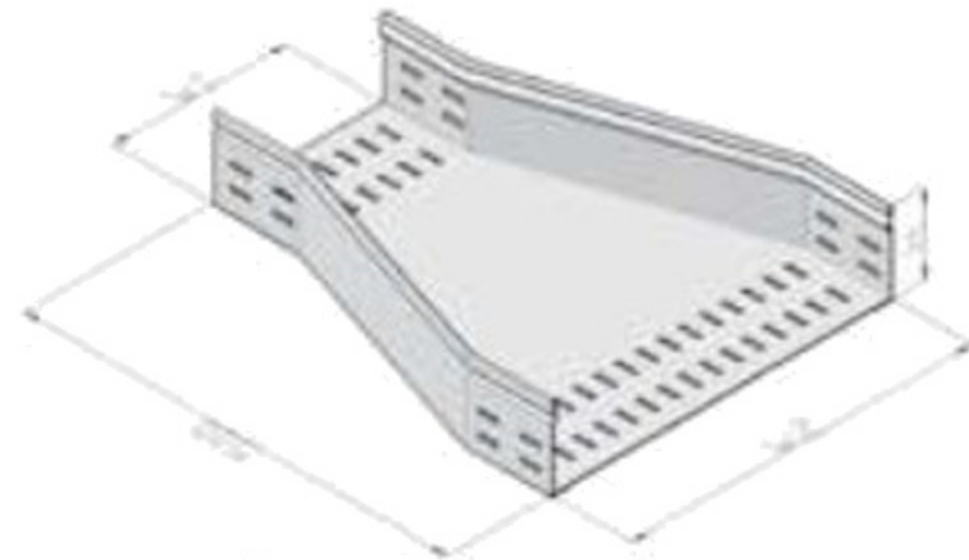


Example for order.

HD HLR CT 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Left redncer for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

CENTER REDUCER

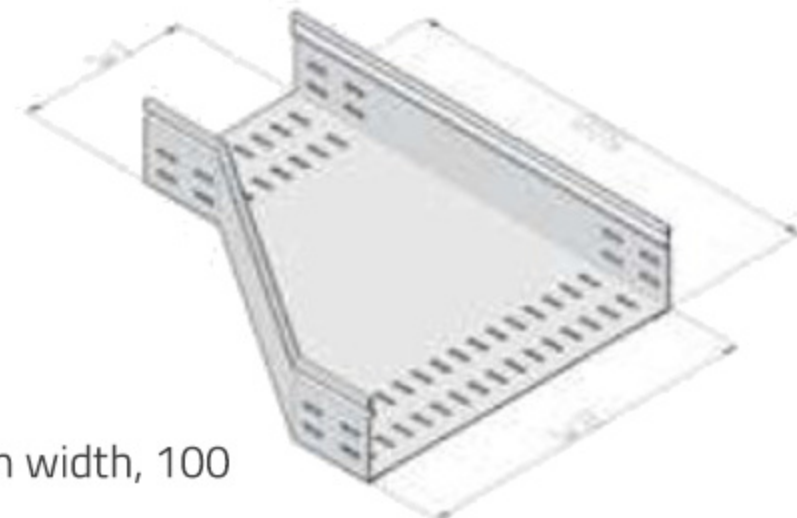


Example for order.

HD HCR CT 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Center redncer for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

RIGHT HAND REDUCER



Example for order.

HD HLR CT 300 x 100 x 10 x1.5

Hot dip galvanized after fabrication horizontal Right redncer for cable tray 300 mm width, 100 mm side height, and 10mm return flange, 1.5 mm thickness.

Cable tray covers

Straight element cover

Steel - Stainless Steel - Aluminum

All properties of cover are the same properties of its tray.
Standard length is 2000, 3000 mm.



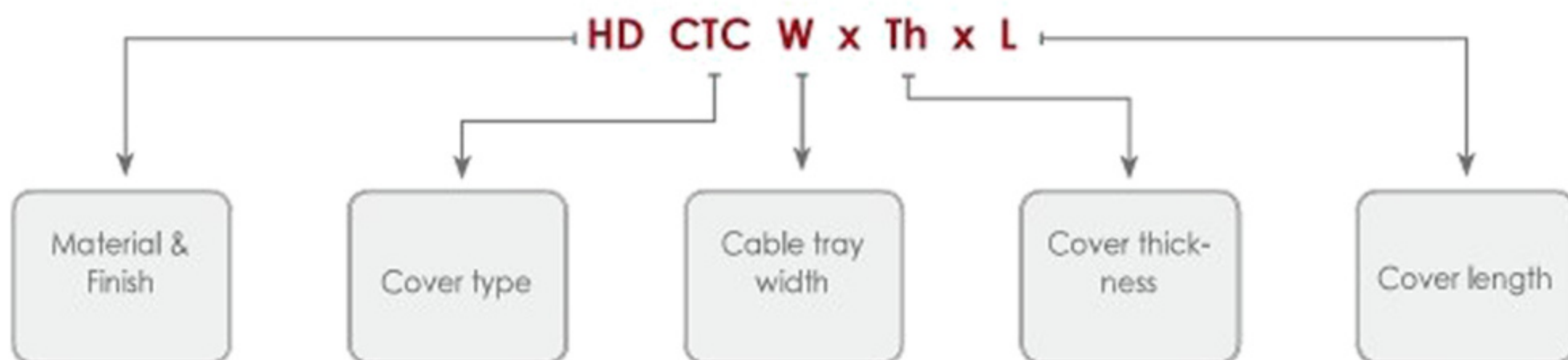
(CTC) Snap on cover
(standard)



(CTPC)
Pyramid Shape cover



(CTUC)
U Shape cover

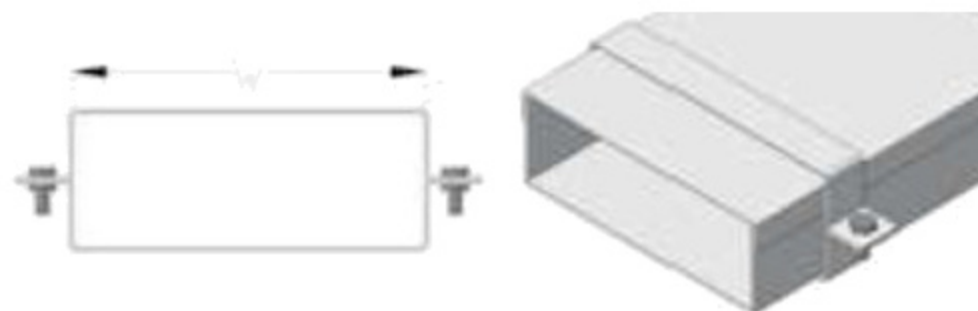


Example for order (HD CDC 200 x 1 x 3000)

Hot dip galvanized after fabrication cover for cable duct 200 mm width, 1 mm thickness, 3000 mm length.

Available sizes of cover

EMECO Description	Width (W)	Thickness (T)
cover 50	50	1 To 2
cover100	100	
cover200	200	
cover300	300	
cover 400	400	
cover 500	500	
cover 600	600	



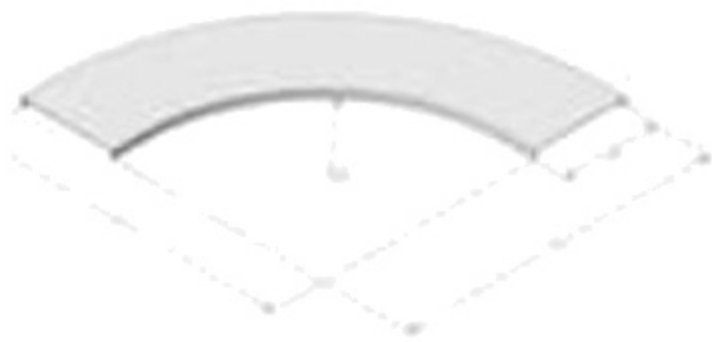
Cover clamp for fixing U
shape cover

Cable trays cover width 700 to 1000 mm is available with 2 mm thickness on request.

Fitting Covers

Steel - Stainless Steel - Aluminum

All properties of cover are the same of its cover of straight element.



Horizontal elbow 90° cover
(HE90CTC)



Horizontal elbow 45° cover
(HE45CTC)



Vertical inside elbow 90° cover
(VIE90CTC)



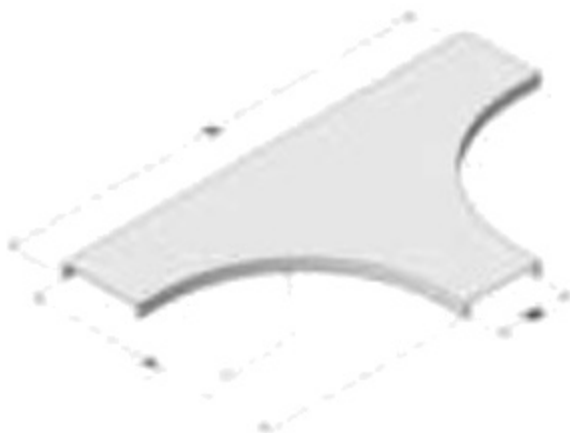
Vertical inside elbow 45° cover
(VIE45CTC)



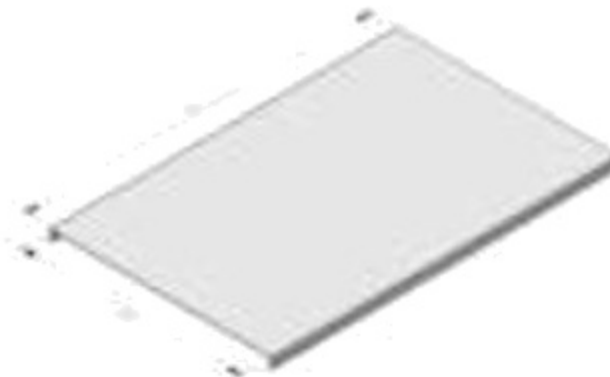
Vertical outside elbow 90° cover
(VOE90CTC)



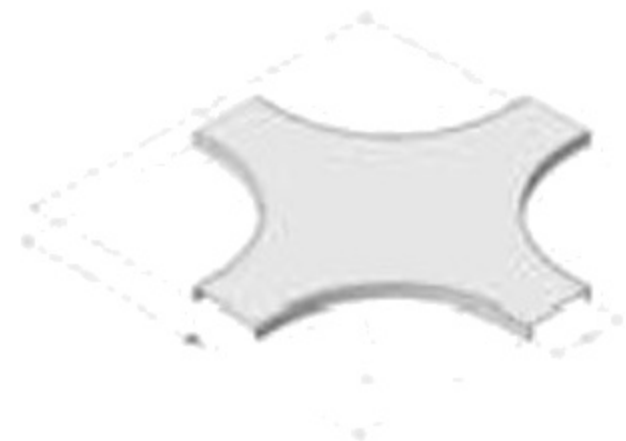
Vertical outside elbow 45° cover
(VOE45CTC)



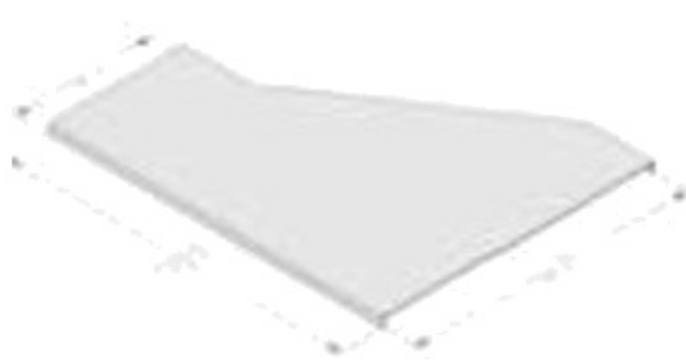
Horizontal Tee cover
(HTCTC)



Vertical Tee cover
(VTCTC)



Horizontal Cross cover
(HCCTC)



Horizontal Left Reduce cover
(HLRCTC)



Horizontal Center Reduce cover
(HCRCTC)



Horizontal Right Reduce cover
(HRRCTC)

Accessories

Steel - Stainless Steel - Aluminum

All properties of cover are the same of its cover of straight element.



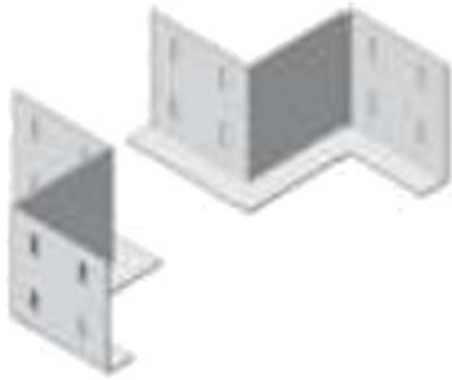
Splice plate
(CTSP)



Horizontal Adjustable joint
(CT HAJ)



Vertical Adjustable joint
(CT VAJ)



Center Reducing splice plate
(CT CRSP)



Right Reducing splice plate
(CT CRSP)



Left Reducing splice plate
(CT CRSP)



Blind end
(CT BE)



Straight element Separator
(CT SPP)



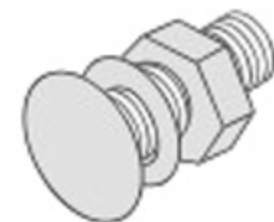
Horizontal Elbow Separator
(CT HSEP)



Vertical inside Separator
(CT VISEP)



Vertical outside Separator
(CT VOSEP)



Steel bolt with nut & washer



المصرية الألمانية
لتشكيل المعادن

Cable tray Ladder



المصرية الألمانية
لتشكيل المعادن



Cable tray Ladder type

Steel - Stainless Steel

Light Duty

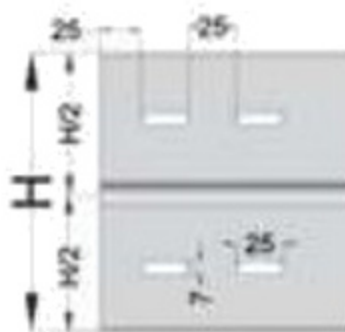


(Heavy Duty)

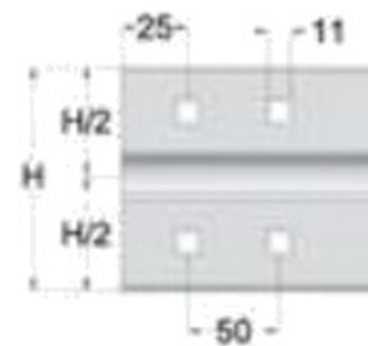


Ladder side & Bolts

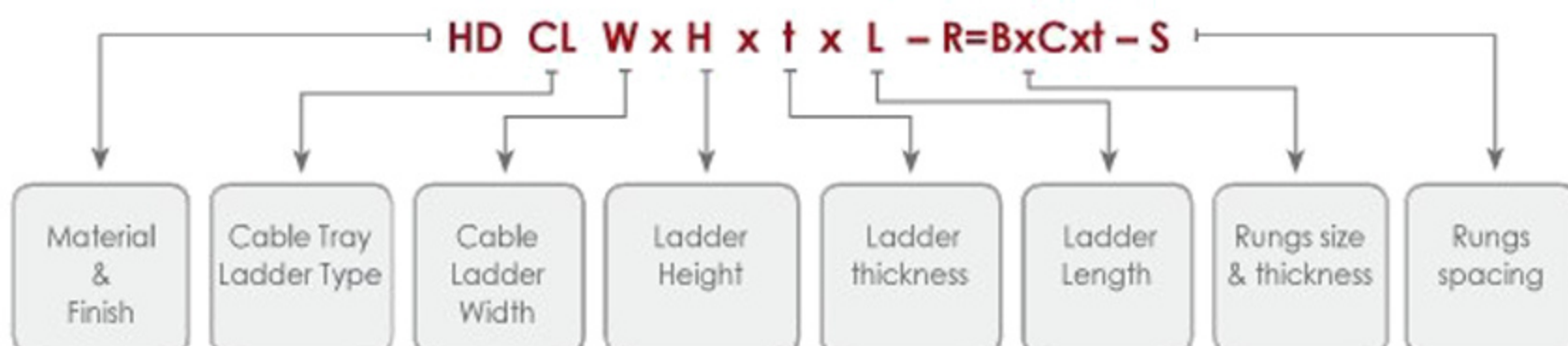
Bolt size 6 mm x 20
8 mm x 25



Bolt size 8 mm x 25
10 mm x 30



EX



Material & finish:

Steel

HD Hot dip galvanized after fabrication according to ASTM A 123

PG Pre galvanized before fabrication according to ASTM A 653SS

EP Electro plated after fabrication ASTM B 633

EC Epoxy coated

Stainless steel

SS 304 stainless steel 304

SS 304L stainless steel 304L

SS 316 stainless steel 316

SS 316L stainless steel 316L

Cable tray type:

Cable tray type CL = cable ladder

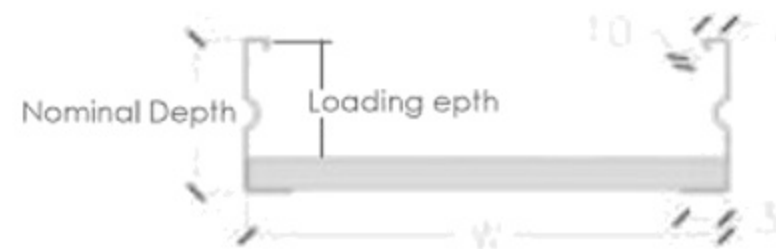
Cable tray width:

Cable tray ladder type width $W = (100 - 200 - 300 - 400 - 500 - 600 - 700 - 800 - 900 - 1000 - 1200)$ mm

Cable tray height:

Cable tray ladder type height $H = (60 - 100 - 125 - 150 - 175 - 200)$ mm

Loading Depth = Nominal Depth - C (Rung height)



Ladder thickness

Light duty ladder thickness $t = 1.5$ mm.

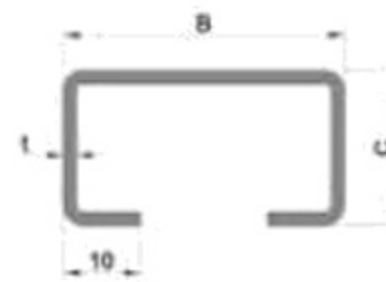
Heavy duty ladder thickness $t = 2$ mm.

Ladder length

Ladder standard length $L = 2000$ & 3000 & 6000 mm.

Rungs size

B	C
30	15
40	20
40	25
50	25



Rungs spacing

S = Standard rung spacing = $(300 - 250 - 225)$ mm

Fixing Rungs on ladder sides



Standard



Reversed rungs

(Steel)

Welded with Co2

(Stainless steel)

Welded with Argon



Welded Rungs

Suitable for pre galvanized steel cable ladder



Bolted Rungs

Suitable for pre galvanized steel cable ladder



Riveted Rungs

Cable tray Ladder type

Available Sizes

Width (W)	Height (H)	Thickness (T)	Length (L)
100	60 & 100 & 125	1.5 & 2	2000 & 3000 & 6000
200			
300			
400			
500			
600			
700			
800			
900			
1000			
1200			
200	150 & 175 & 200	1.5 & 2	2000 & 3000 & 6000
300			
400			
500			
600			
700			
800			
900			
1000			
1200			



EX.

HD CL 300x150x2x6000-R40x25x2 S=225

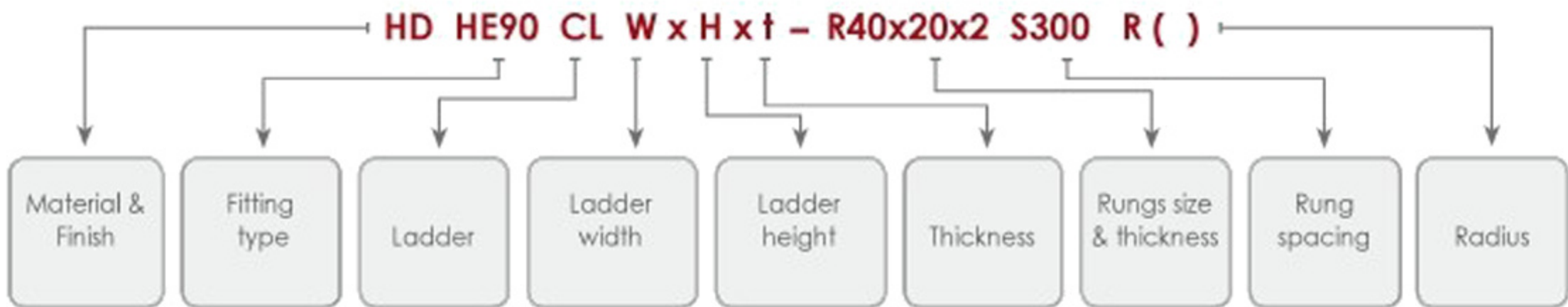
Hot dip galvanized after fabrication cable tray ladder type, 300 mm width, 150mm side height, 2mm thickness, 6000 mm length, rungs size 40x25mm, 2mm thickness, rungs spacing 225 mm from center

Cable tray Ladder type (Fitting)

Steel - Stainless steel

All Cable trays Ladder type fitting has the same properties of its cable ladder In (size - thickness - finish),

Ex.



Fitting type means

HE90: Horizontal Elbow 90°.

HE45: Horizontal Elbow 45°

HT: Horizontal Tee.

HC: Horizontal Cross.

HRR: Horizontal Right Reducer.

HCR: Horizontal Center Reducer.

HLR: Horizontal Left Reducer.

VEI90: Vertical Elbow 90 Inside.

VEO90: Vertical Elbow 90 Outside.

VE145: Vertical Elbow 45 Inside.

VE145: Vertical Elbow 45 Outside.

VT: Vertical Tee.

VJIE: Vertical jointed inside elbow

VJOE: Vertical jointed outside elbow

Radius:

Standard value of fitting radius is: 300 mm for width up to 300 mm & 600 mm for width from 400mm up to 1000 mm. Other radius can be manufactured up on request (500-900-1200)

HORIZONTAL ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60 To 200	500	500	300
200		600	600	
300		700	700	
400		1100	1100	600
500		1200	1200	
600		1300	1300	
700		1400	1400	
800		1500	1500	
900		1600	1600	
1000		1700	1700	



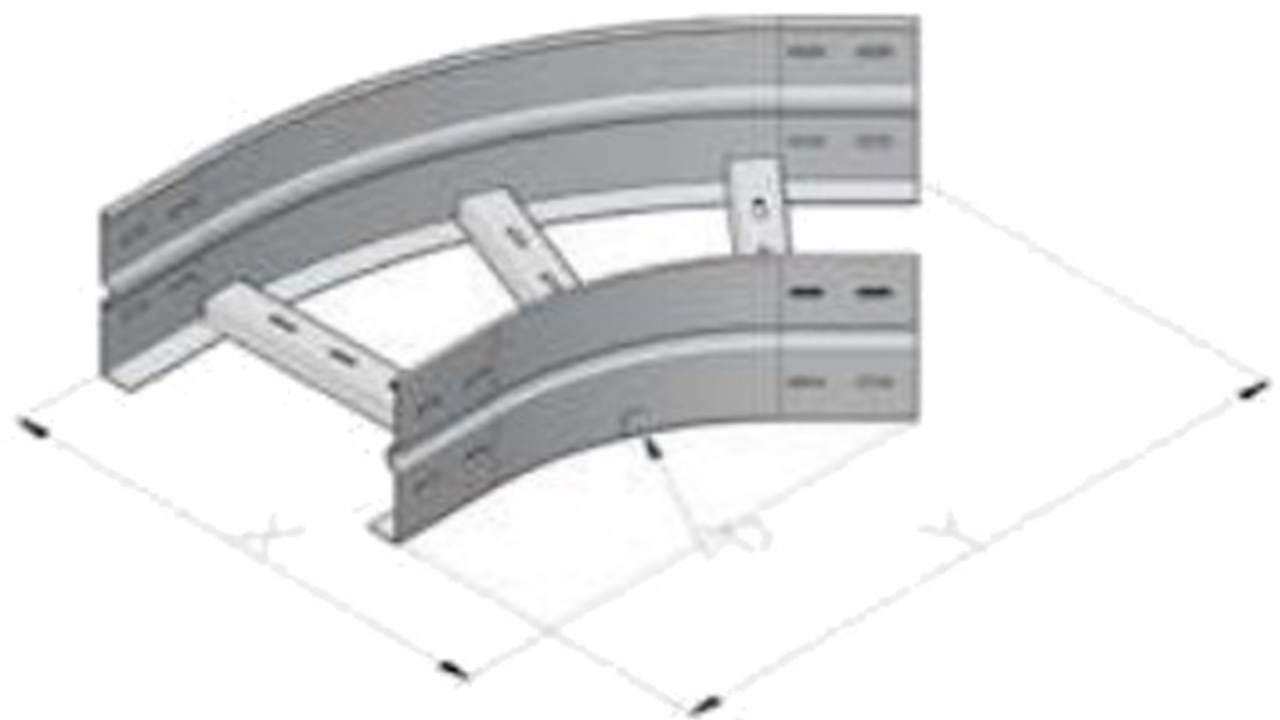
Example for order.

HD HE90 CL 300x100x2-R40x20x2 S=300

Hot dip galvanized after fabrication horizontal Elbow 90° for cable ladder 300 mm width, 100 mm side height, 2mm thickness rungs size 40x20 mm, 2mm thickness, rung spacing 300 mm.

HORIZONTAL ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60 To 200	259	454	300
200		358	524	
300		458	595	
400		446	878	600
500		747	949	
600		846	1020	
700		946	1090	
800		1046	1160	
900		1146	1231	
1000		1246	1302	



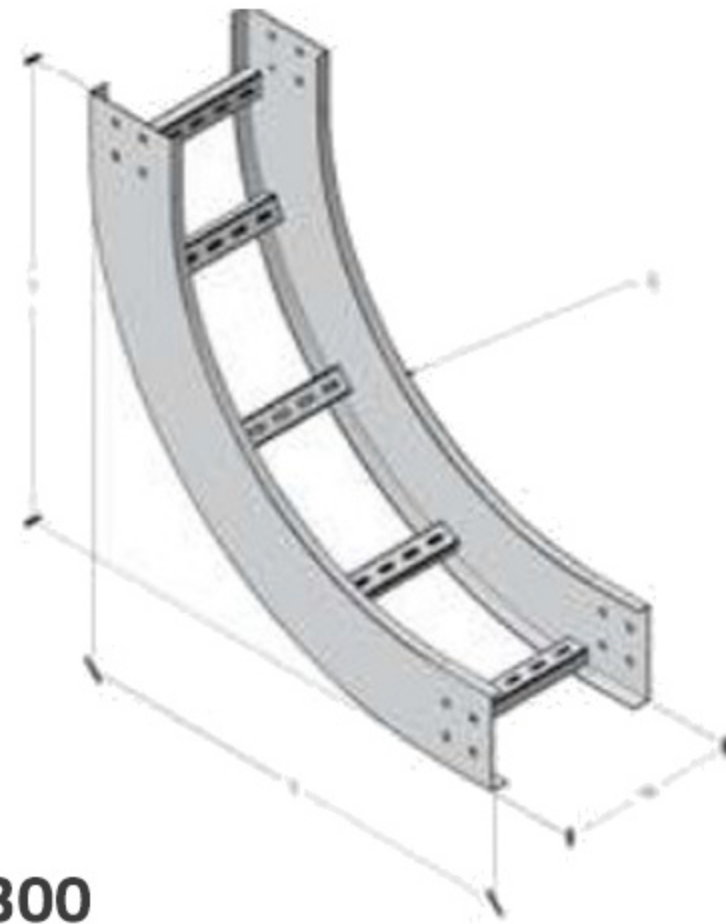
Example for order.

HD HE45 CL 400x100x2-R40x20x2 S=300

Hot dip galvanized after fabrication horizontal Elbow 45° for cable ladder 400 mm width 100 mm side height, 2 mm thickness rungs size 40x20 mm, 2mm thickness, rung spacing 300 mm.

VERTICAL INSIDE ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	460	460	300
	100	500	500	
	150	550	550	
	175	575	575	
300	200	747	949	600
	60	460	460	
400	100	500	500	
	150	550	550	
1000	175	575	575	
	200	1246	1302	



Example for order.

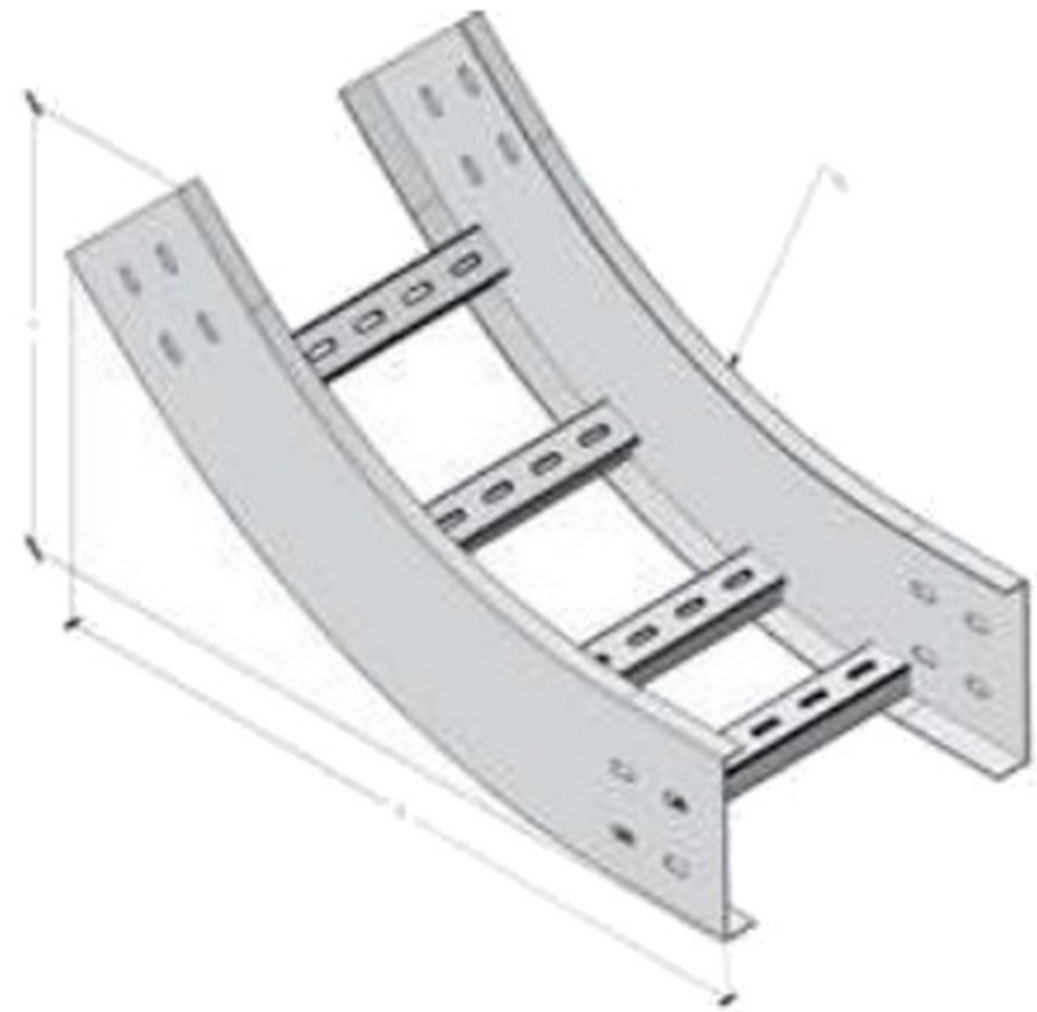
SS316 VEI90 CL 400x100x2-R40x20x2 S=300

Stainless steel 316 Vertical Elbow inside 90° for cable ladder 400 mm width, 100 mm side height, 2mm thickness

rung size 40x20mm, 2mm thickness, rung spacing 300 mm.

VERTICAL INSIDE ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	425	221	300
	100	454	259	
	150	489	309	
	175	507	334	
300	200	747	949	600
	60	637	425	
400	100	666	454	
	150	701	489	
1000	175	718	422	
	200	1246	1302	



Example for order.

PG VE145 CL 200x60x2-R40x20x2 S=300

Pre galvanized Vertical Elbow inside 45° for cable ladder 200 mm width, 60 mm side height, 2mm thickness.

rung size 40x20mm, 2mm thickness rung spacing 300.

VERTICAL OUTSIDE ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	460	460	300
	100	500	500	
To	150	550	550	
	175	575	575	
300	200	747	949	600
	60	460	460	
400	100	500	500	
	150	550	550	
To	175	575	575	
	200	1246	1302	
1000				



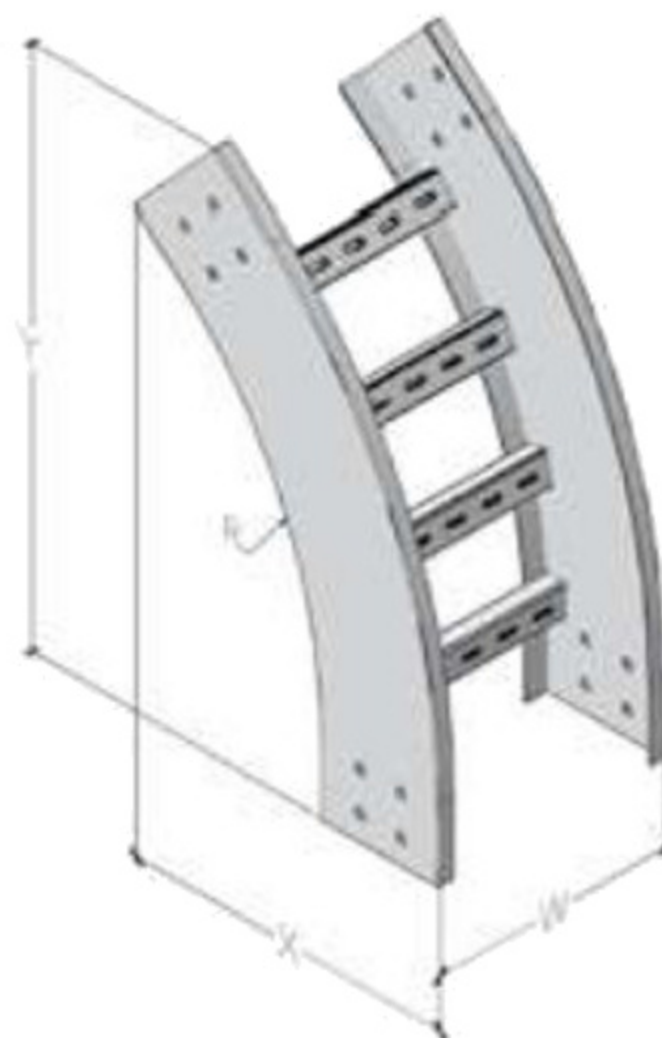
Example for order

HD VE090 CL 400x100x2-R40x20x2 S=300

Hot dip galvanized after fabrication Vertical Elbow outside 90° for cable ladder 400 mm width 100 mm side height, 2 mm thickness rung size 40x20mm, 2mm thickness, rung spacing 300 mm.

VERTICAL OUTSIDE ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	425	221	300
	100	454	259	
To	150	489	309	
	175	507	334	
300	200	747	949	600
	60	637	425	
400	100	666	454	
	150	701	489	
To	175	718	422	
	200	1246	1302	
1000				



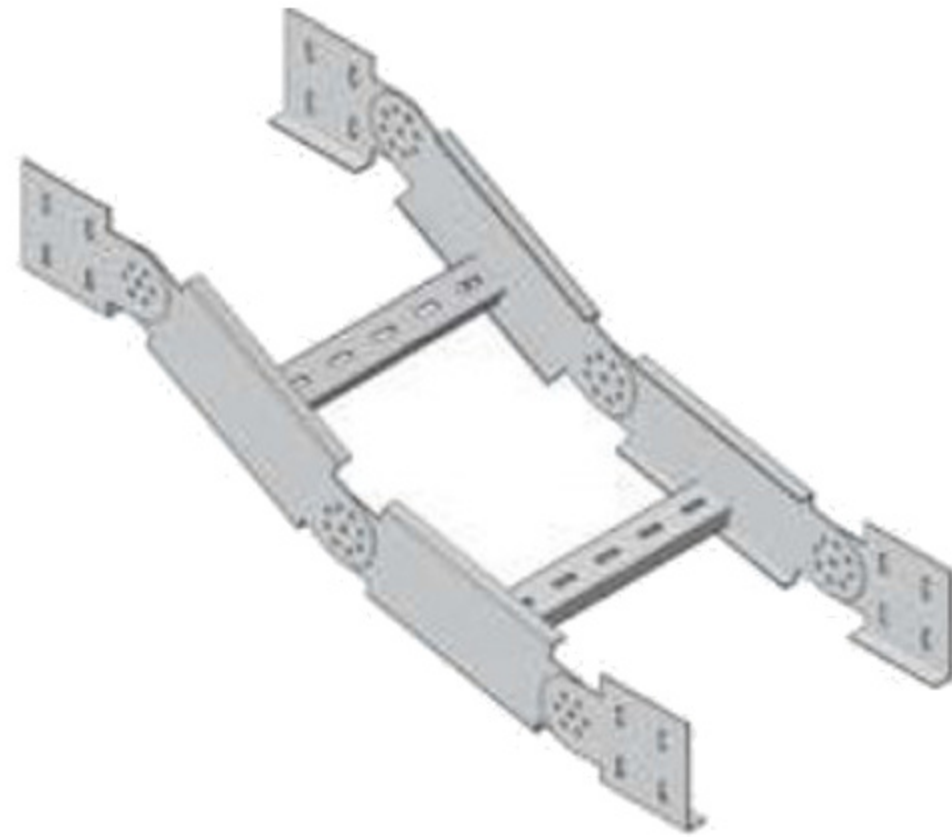
Example for order.

HD VE045 CL 200x60x2-R40x20x2 S=300

Hot dip galvanized after fabrication Vertical Elbow outside 45° for cable ladder 200 mm width, 60 mm side height, 2mm thickness. Rung size 40x20mm, 2mm thickness, rung spacing 300.

VERTICAL JOINTED ELBOW INSIDE

Width (W)	Height (H)	Radius (R)
100 To 300	60 To 200	300
300 To 1000		600



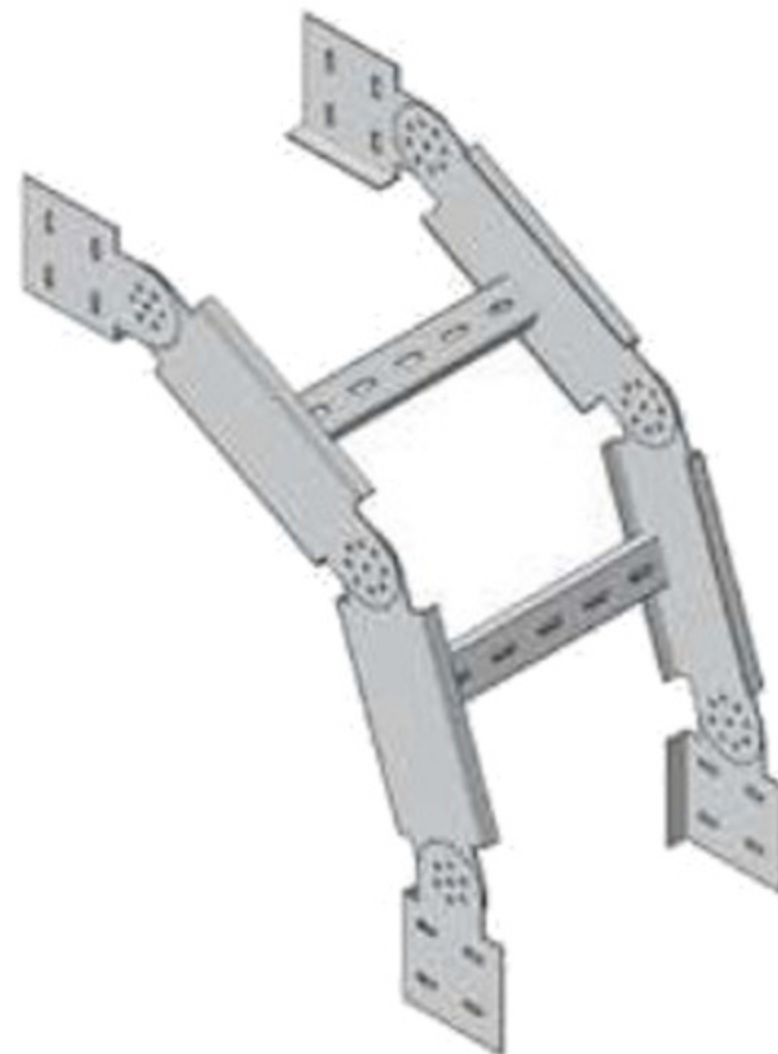
Example for order

HD VJIE CL 200x60x2-R40x20x2 S=300

Hot dip galvanized after fabrication Vertical jointed inside Elbow for cable ladder 200 mm width 60 mm side height, 2mm thickness. Rung size 40x20mm, 2mm thickness, rung spacing 300.

VERTICAL JOINTED ELBOW OUTSIDE

Width (W)	Height (H)	Radius (R)
100 To 300	60 To 200	300
400 To 1000		600

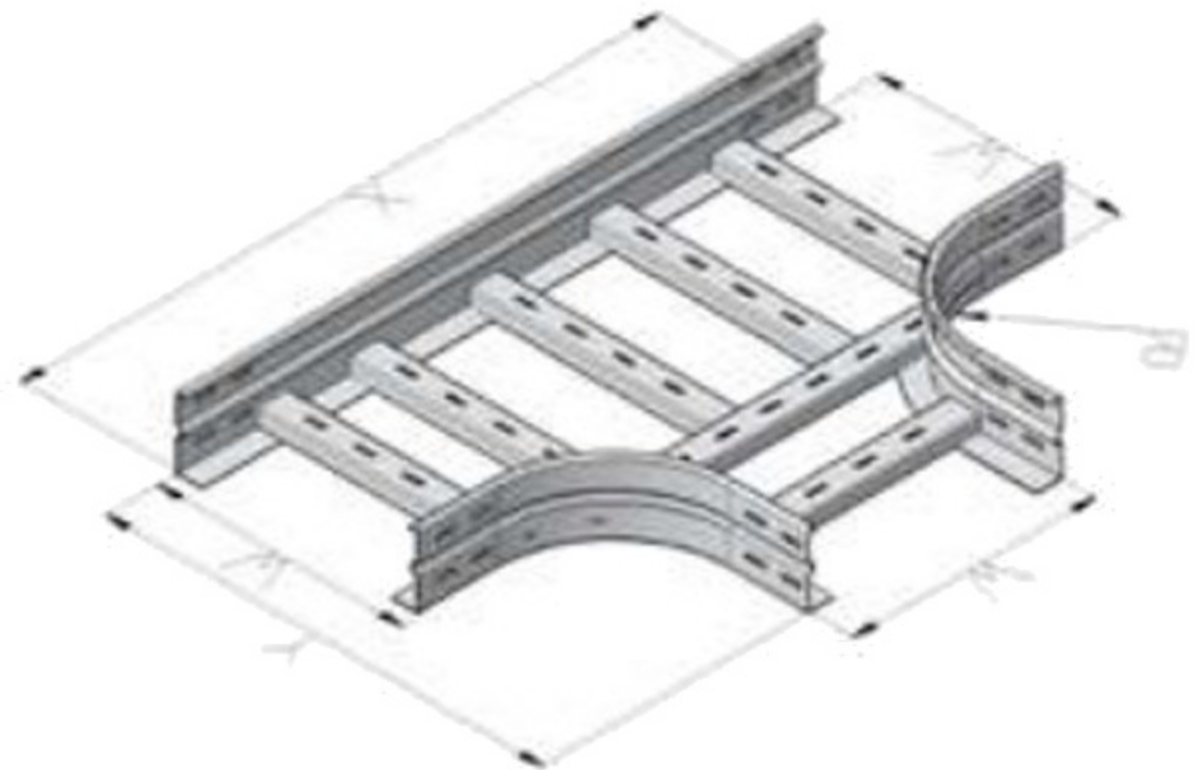


HD VJOE CL 200x60x2-R40x20x2 S=300

Hot dip galvanized after fabrication Vertical jointed outside Elbow for cable ladder 200 mm width, 60 mm side height, 2mm thickness. Rung size 40x20mm, 2mm thickness, rung spacing 300.

HORIZONTAL TEE

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100/ 100/ 100	60	900	500	300
200/ 200/ 200		1000	600	
300/ 300/ 300		1100	700	
400/ 400/ 400		1800	1100	
500/ 500/ 500		1900	1200	
600/ 600/ 600	To	2000	1300	600
700/ 700/ 700	200	2100	1400	
800/ 800/ 800		2200	1500	
900/ 900/ 900		2300	1600	
1000/ 1000/ 1000		2400	1700	



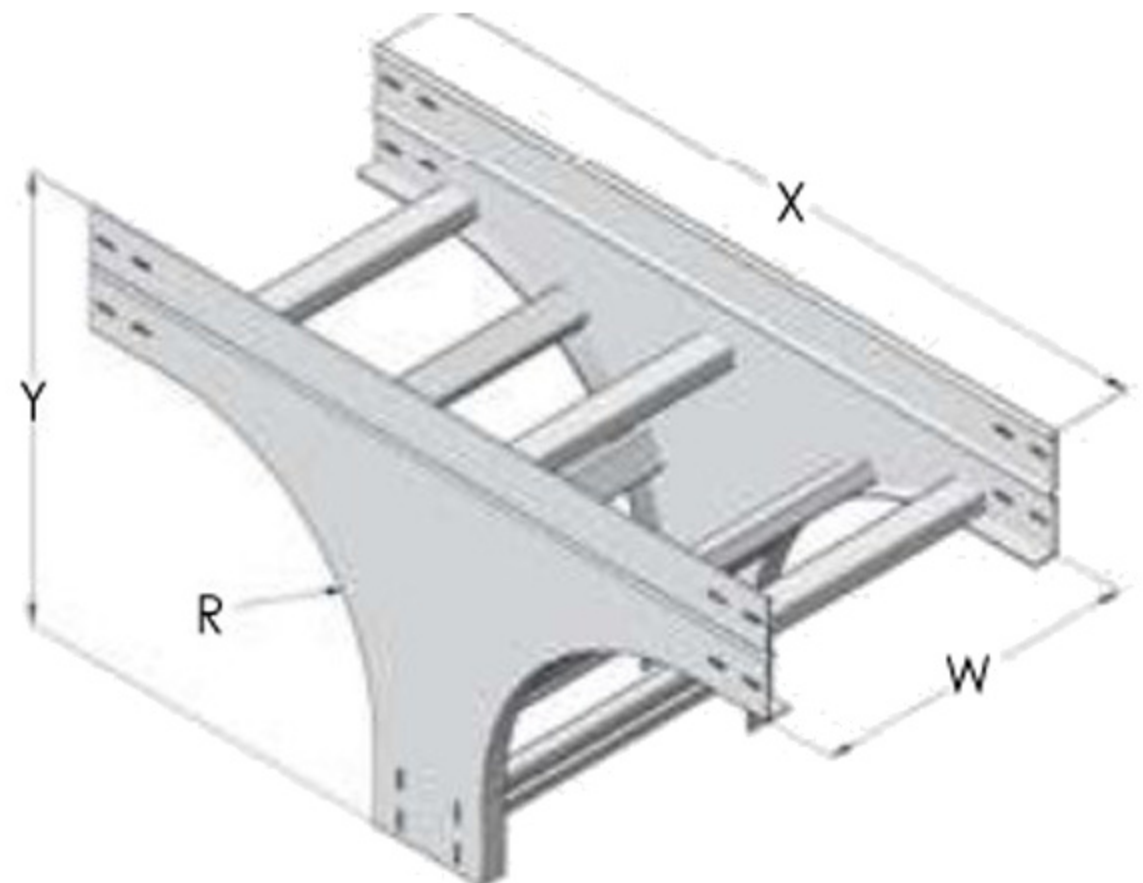
Example for order

HD HT CL 300x100x2-R40x20x2 S=300

Hot dip galvanized after fabrication Horizontal Tee for cable ladder 300 mm width, 100 mm side height, 2mm thickness. Rung size 40x20mm, 2mm thickness, rung spacing 300.

VERTICAL TEE

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	860	460	300
		900	500	
		950	550	
507		334		
747		949		
To	200	1460	760	600
400		1500	800	
To		1550	850	
1000		718	422	
		1246	1302	



EX

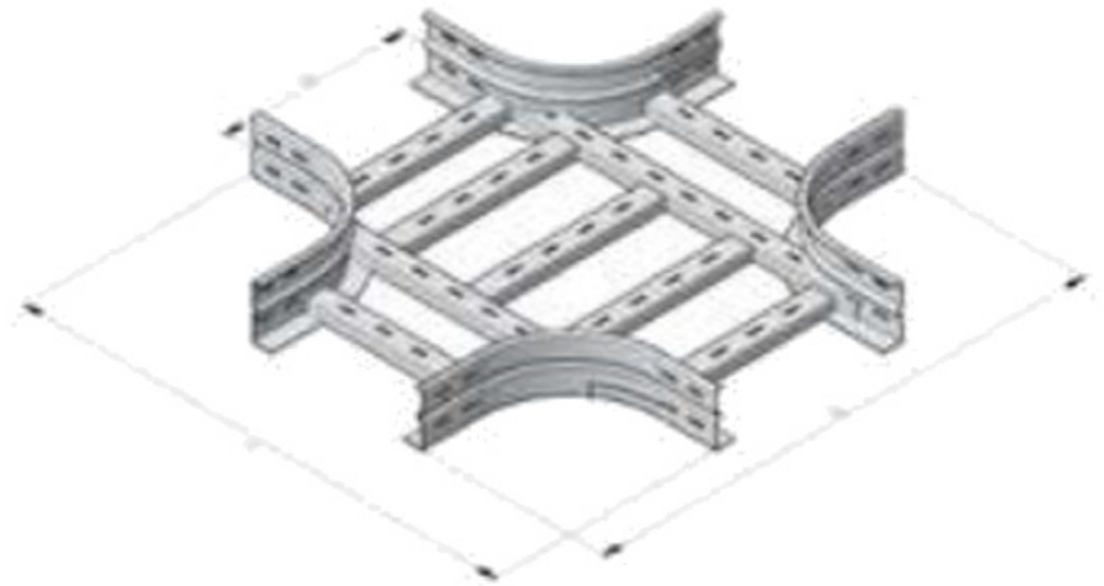
HD VI CL 300x100x2-R40x20x2 S=300

Hot dip galvanized after fabrication Vertical tee for cable ladder 200 mm width 100 mm side height 2mm

thickness. Rung size 40x20mm, 2mm thickness, rung spacing 300.

HORIZONTAL CROSS

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100 / 100/ 100/ 100	60 To 200	900	500	300
200/ 200/ 200/ 200		1000	600	
300/ 300/ 300/ 300		1100	700	
400/ 400/ 400/ 400		1800	1100	600
500/ 500/ 500/ 500		1900	1200	
600/ 600/ 600/ 600		2000	1300	
700/ 700/ 700/ 700		2100	1400	
800/ 800/ 800/ 800		2200	1500	
900/ 900/ 900/ 900		2300	1600	
1000 /1000/ 1000/ 1000		2400	1700	



EX.

HD HC CL 300x100x2-R40x20x2 S=300

Hot dip galvanized after fabrication Horizontal Cross for cable ladder 300 mm width, 100 mm side height, 2mm thickness. Rung size 40x20mm, 2mm thickness, rung spacing 300.

HORIZONTAL CENTER REDUCER



HORIZONTAL RIGHT REDUCER



HORIZONTAL LEFT REDUCER



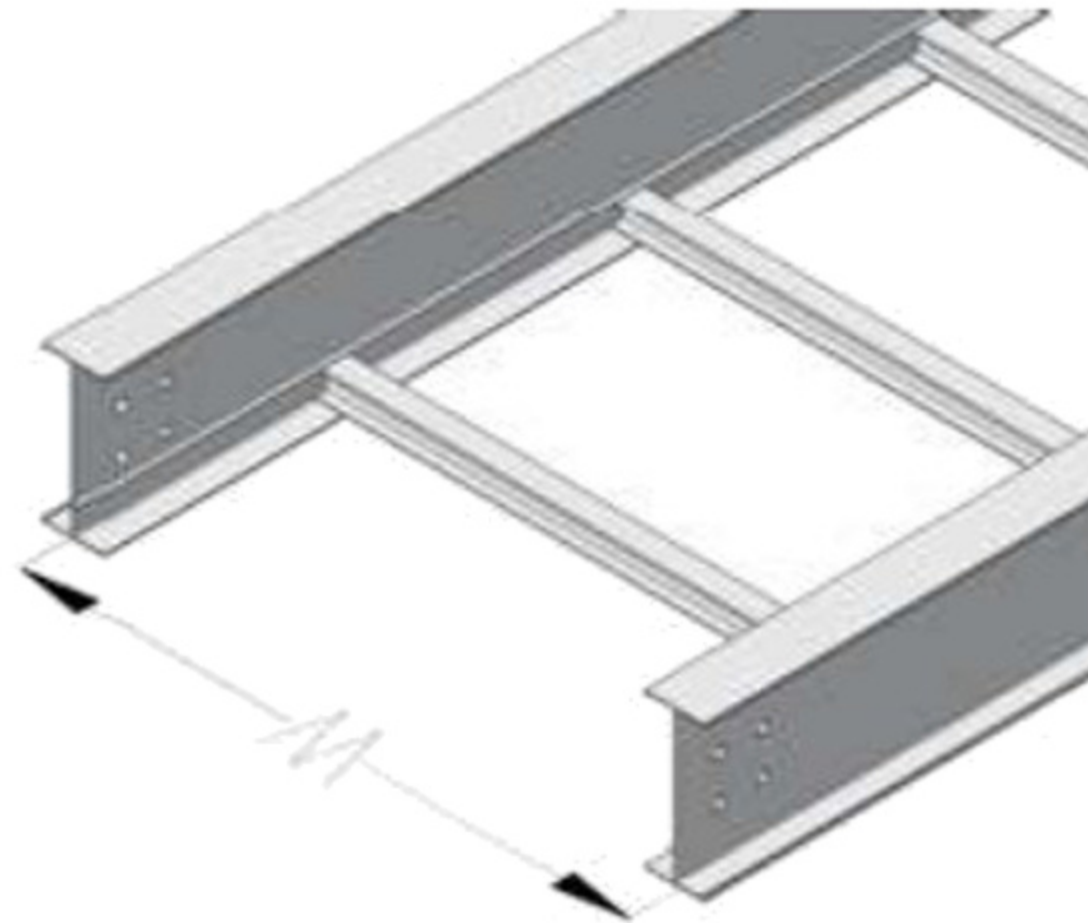
EX

HD HLR CL (300/500)x100x2-R40x20x2 S=300

Hot dip galvanized after fabrication Horizontal Left reducer for cable ladder 300/500 mm width, 100 mm side height, 2mm thickness. Rung size 40x20mm, 2mm thickness, rung spacing 300.

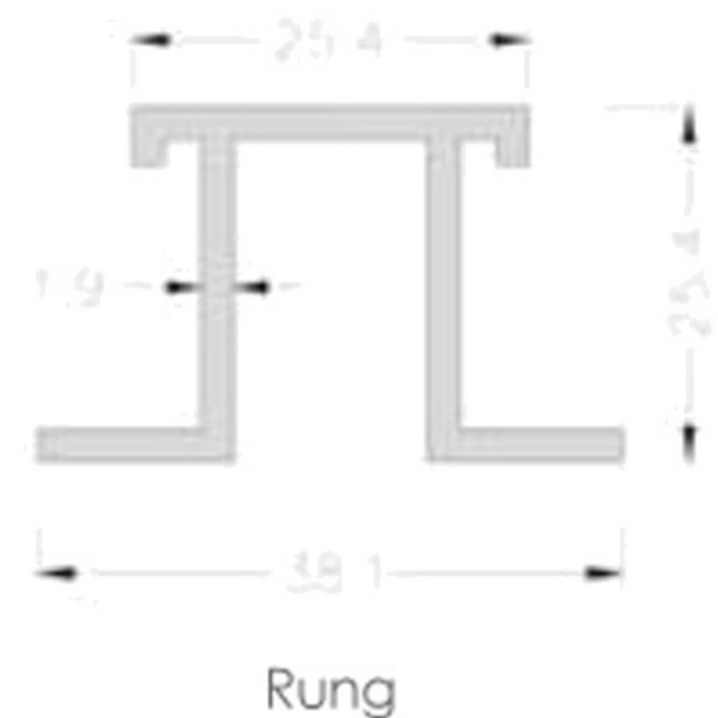
Cable tray Ladder type (Heavy Duty)

Straight Element - Aluminum



- Aluminum section made from aluminum alloy 6063.

Width (W)	Height (H)	Thickness (T)	Length (L)
150	155.5	2	2000 & 3000 & 6000
200			
300			
400			
500			
600			
700			
800			
900			
1000			
1200			



EX.

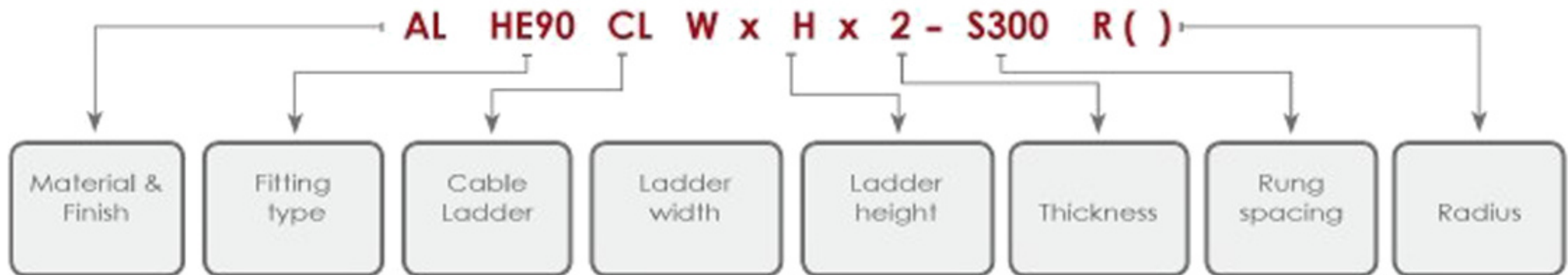
AL CL 300x155.5x6000-S=225

Aluminum cable tray ladder type, 300 mm width, 155.5 mm side height, 2mm thickness, 6000 mm length, rungs spacing 225 mm from center.

Cable tray Ladder type (Fitting)

Aluminum

All Cable trays Ladder type fitting has the same properties of its cable ladder in (size - thickness - finish).



Fitting type means

HE90: Horizontal Elbow 90°

HE45: Horizontal Elbow 45°

HT: Horizontal Tee.

HC: Horizontal Cross.

HRR: Horizontal Right Reducer.

HCR: Horizontal Center Reducer.

HLR: Horizontal Left Reducer.

VEI90: Vertical Elbow 90 Inside.

VEO90: Vertical Elbow 90 Outside.

VE145: Vertical Elbow 45 Inside.

VE045: Vertical Elbow 45 Outside.

Radius

Standard value of fitting radius is 600 mm:

HORIZONTAL ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	155	500	500	600
200		600	600	
300		700	700	
400		1100	1100	
500		1200	1200	
600		1300	1300	
700		1400	1400	
800		1500	1500	
900		1600	1600	
1200		1700	1700	



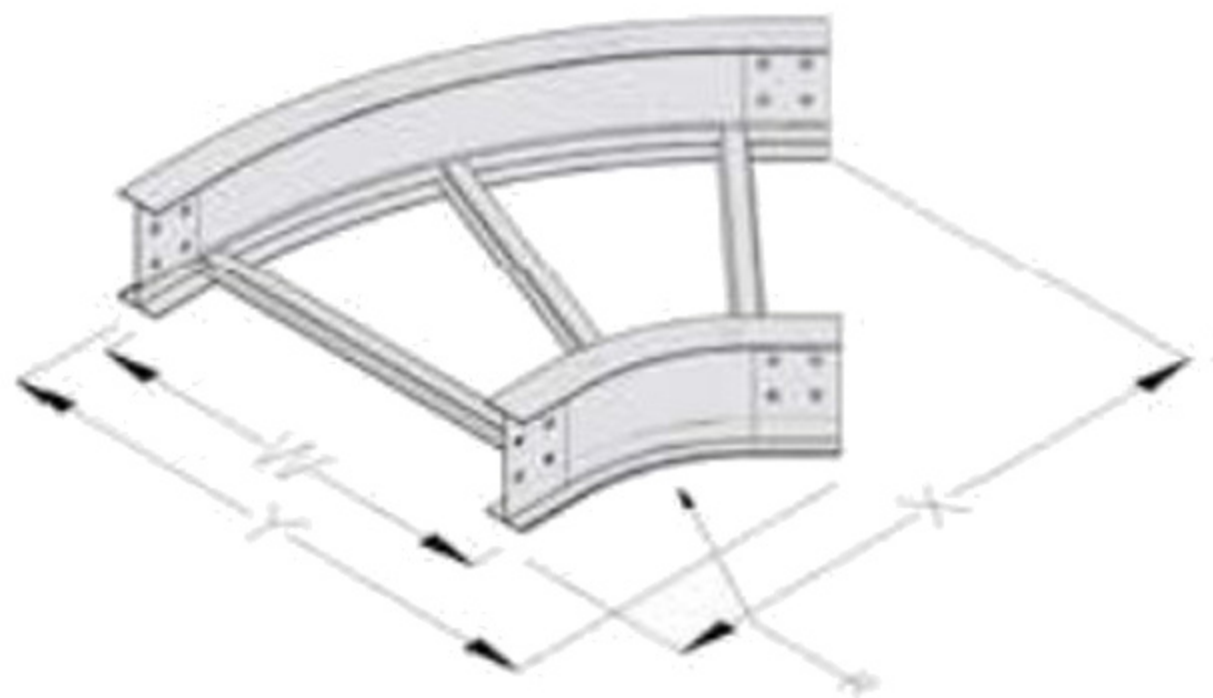
Example for order

AL HE90 CL 300x155x2-S=300

Aluminum horizontal Elbow 90° for cable ladder 300 mm width. 155 mm side height, 2 mm thickness rungs size 40x25 mm, 2 mm thickness, rung spacing 300 mm.

HORIZONTAL ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	155	460	460	600
		500	500	
		550	550	
To		575	575	
300		575	575	
		747	949	
		460	460	
400		500	500	
		550	550	
		To	575	
1200		575	575	
		1246	1302	



ALHE45 CL 400x155x2-S=300

Aluminum horizontal Elbow 45° for cable ladder 400 mm width, 155 mm side height, 2mm thickness rungs size 40x25mm 2 mm thickness, rung spacing 300 mm.

VERTICAL INSIDE ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	155	460	460	600
		500	500	
To		550	550	
300		575	575	
		747	949	
400		460	460	
		500	500	
To		550	550	
1200		575	575	
		1246	1302	



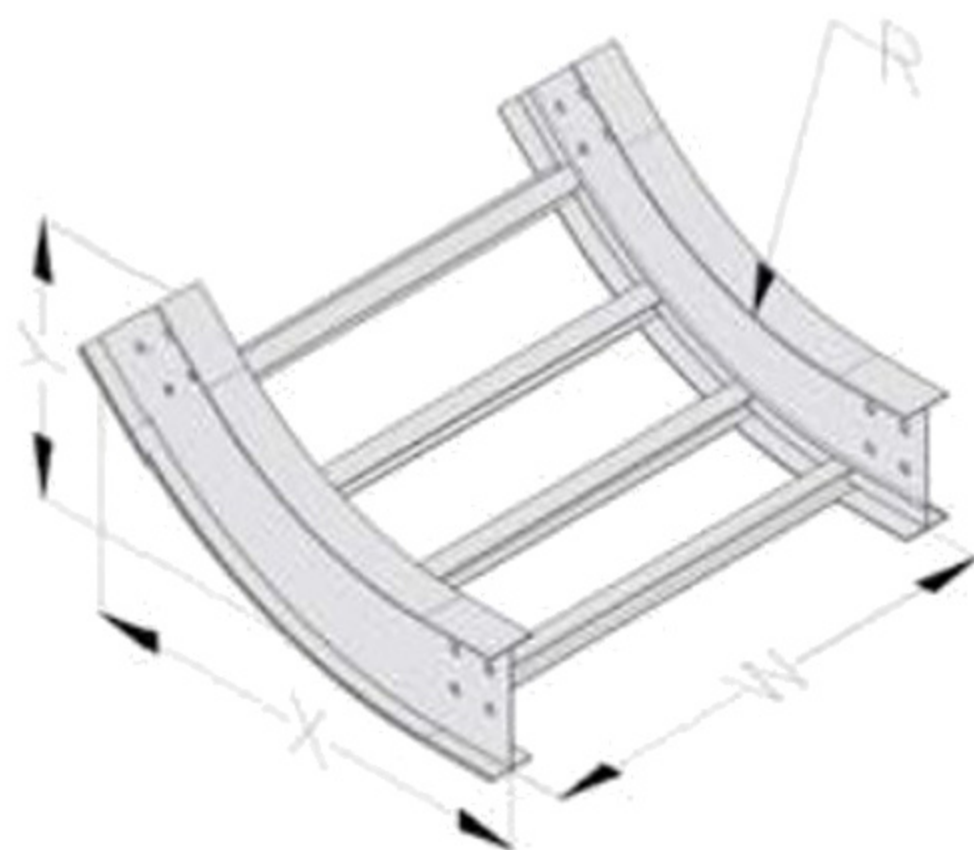
Example for order

AL VEI90 CL 400x155x2-S=300

Aluminum Vertical Elbow inside 90° for cable ladder 400 mm width, 155 mm side height, 2 mm thickness rung size 40x25mm, 2mm thickness, rung spacing 300 mm.

VERTICAL INSIDE ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	155	460	460	600
		500	500	
To		550	550	
300		575	575	
		747	949	
400		460	460	
		500	500	
To		550	550	
1200		575	575	
		1246	1302	



AL VEI45 CL 200X155X2-S=300

Aluminum Vertical Elbow inside 45° for cable ladder 200 mm width, 155 mm side height, 2mm thickness.rung size 40x25 mm 2 mm thickness, rung spacing 300 mm.

VERTICAL OUTSIDE ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	155	425	221	600
		454	259	
To		489	309	
		507	334	
300		747	949	
		637	425	
400		666	454	
To		701	489	
		718	422	
1200		1246	1302	



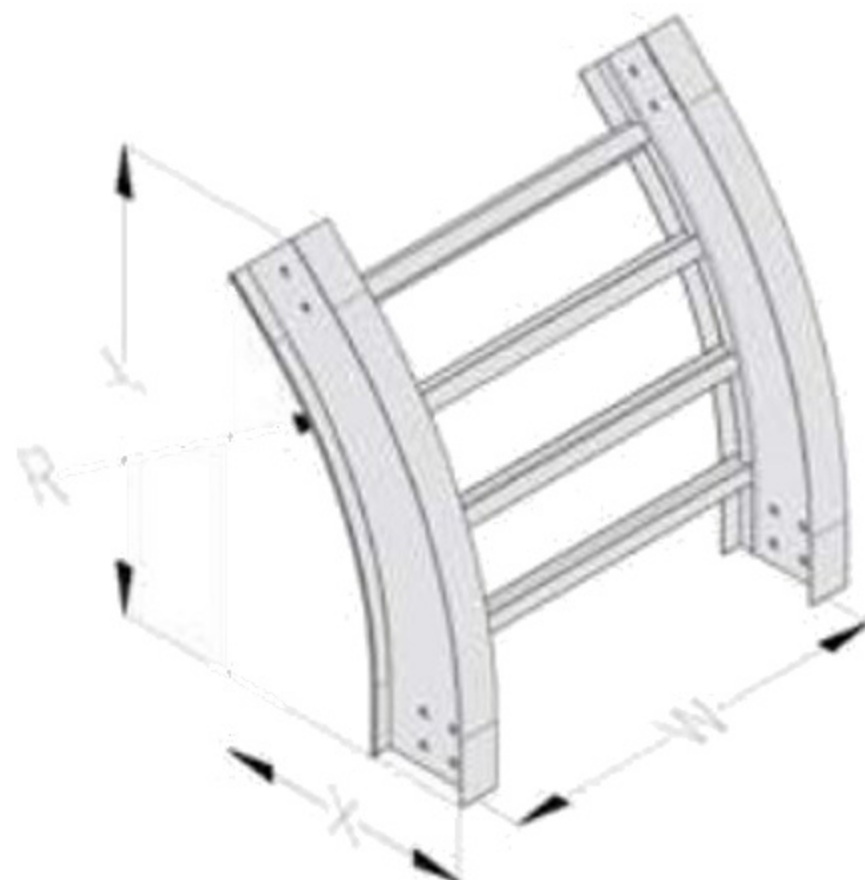
Example for order

AL VE090 CL 400x155x2-S=300

Aluminum Vertical Elbow outside 90° for cable ladder 400 mm width, 155 mm side height, 2 mm thickness rung
size 40x25mm, 2mm thickness, rung spacing 300 mm.

VERTICAL OUTSIDE ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	155	425	221	600
		454	259	
To		489	309	
		507	334	
300		747	949	
		637	425	
400		666	454	
To		701	489	
		718	422	
1200		1246	1302	



ALVE045 CL 200x60x2-S=300

Aluminum Vertical Elbow outside 45° for cable ladder 200 mm width, 155 mm side height, 2mm thickness.

Rung size 40x25mm, 2mm thickness, rung spacing 300.

HORIZONTAL TEE

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100/ 100/ 100	155	900	500	600
200/ 200/ 200		1000	600	
300/ 300/ 300		1100	700	
400/ 400/ 400		1800	1100	
500/ 500/ 500		1900	1200	
600/ 600/ 600		2000	1300	
700/ 700/ 700		2100	1400	
800/ 800/ 800		2200	1500	
900/ 900/ 900		2300	1600	
1000/ 1000/ 1000		2400	1700	



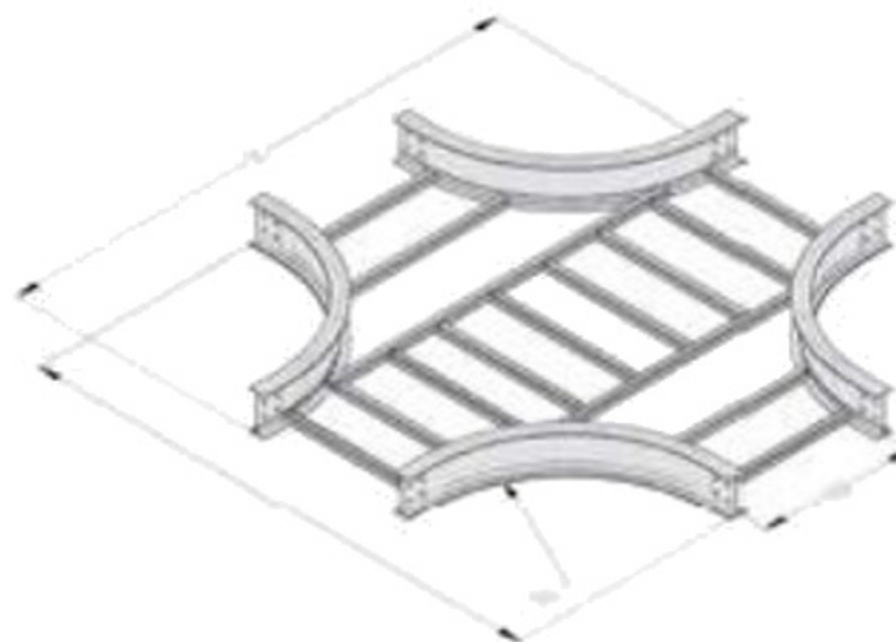
EX

AL HT CL 300x155x2-S=300

Aluminum Horizontal Tee for cable ladder 300 mm width, 155 mm side height, 2mm thickness. Rung size 40x25mm, 2mm thickness, rung spacing 300.

HORIZONTAL CROSS

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100 / 100/ 100/ 100	155	900	500	600
200/ 200/ 200/ 200		1000	600	
300/ 300/ 300/ 300		1100	700	
400/ 400/ 400/ 400		1800	1100	
500/ 500/ 500/ 500		1900	1200	
600/ 600/ 600/ 600		2000	1300	
700/ 700/ 700/ 700		2100	1400	
800/ 800/ 800/ 800		2200	1500	
900/ 900/ 900/ 900		2300	1600	
1000 /1000/ 1000/ 1000		2400	1700	



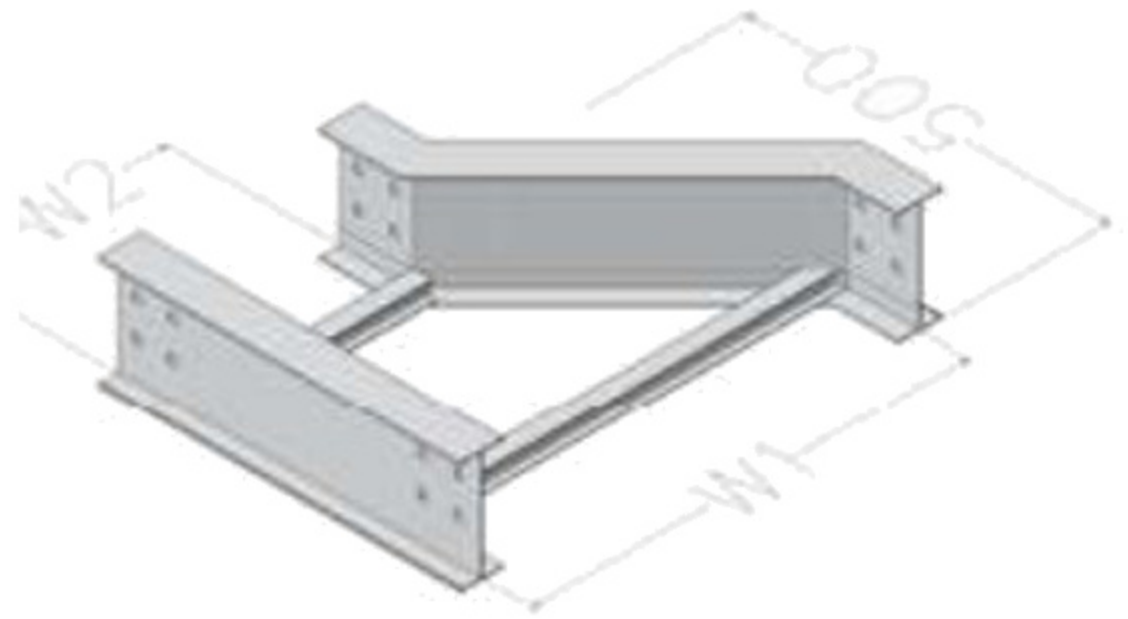
EX.

AL HC CL 300x155x2-S-300

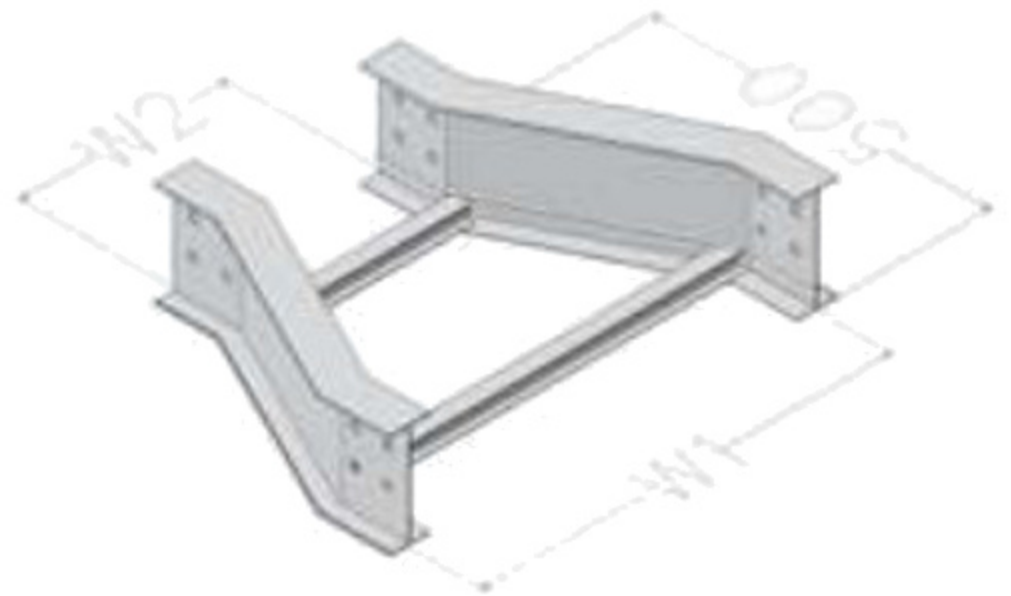
Aluminum Horizontal Cross for cable ladder 300 mm width, 155 mm side height, 2mm thickness. Rung size 40x25mm, 2mm thickness, rung spacing 300.

HORIZONTAL REDUCER

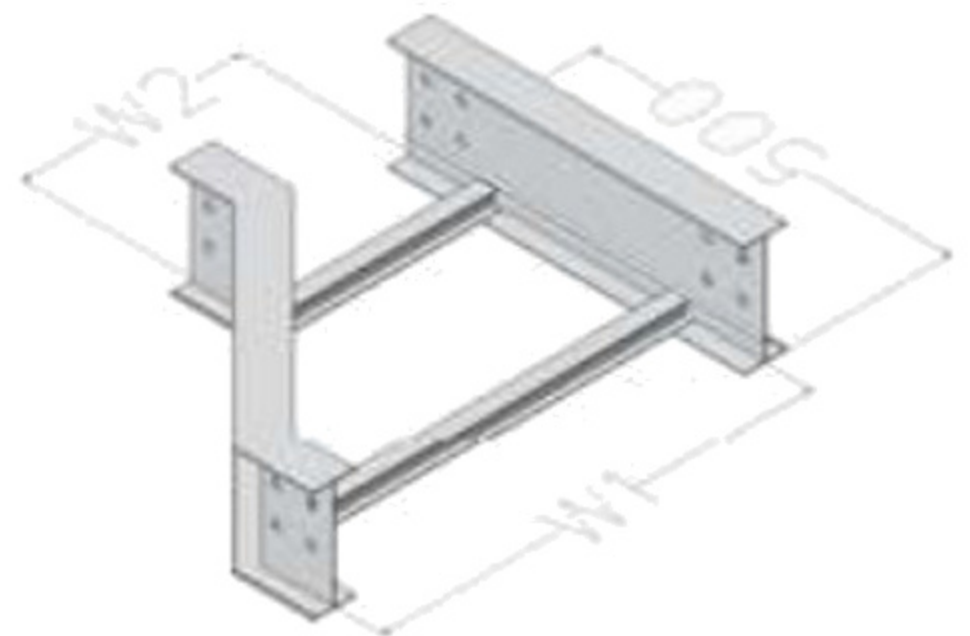
HORIZONTAL LEFT REDUCER



HORIZONTAL CENTER REDUCER



HORIZONTAL RIGHT REDUCER



Ex

Al Hrr CI 200/300x155x2-S=300

Aluminum Horizontal Right Reducer For Ladder 200/300 mm Width , 155mm hieght, 2mm thickness, Rung Spacing 300 mm

Cable Ladder covers

Steel - Stain less Steel - Aluminum

All properties of cover are the same properties of its ladder.

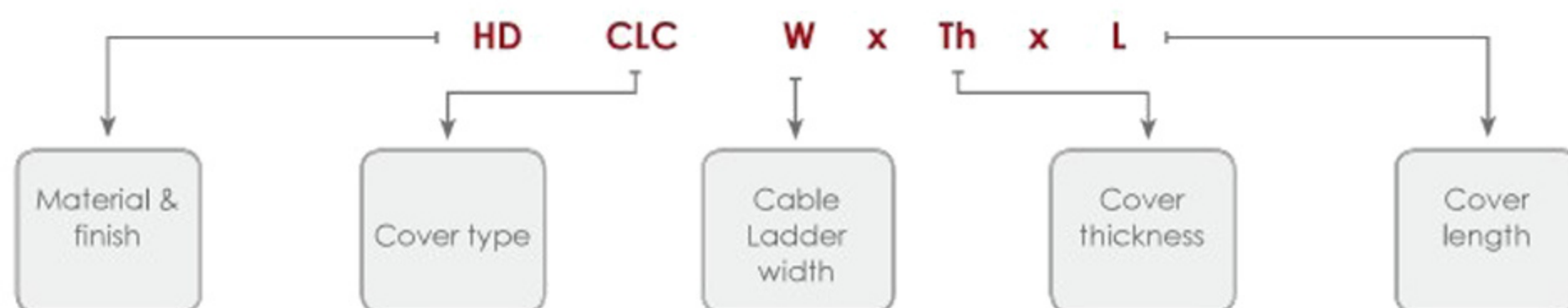
Standard length is 2000, 3000 mm.



(CLSC) U cover
(Standard)



(CLVC)
Ventilated cover



Example for order (HD CLC 200 x 1 x 3000)

Hot dip galvanized after fabrication cover for cable Ladder 300 mm width, 1.5 mm thickness, 3000 mm length.

Available sizes of cover

EMECO Description	Width (W)	Thickness (T)
CL cover 50	50	1 To 2
CL cover 100	100	
CL cover 200	200	
CL cover 300	300	
CL cover 400	400	1.25 To 2
CL cover 500	500	
CL cover 600	600	
CL cover 700	700	
CL cover 800	800	2
CL cover 900	900	
CL cover 1000	1000	
CL cover 1200	1200	

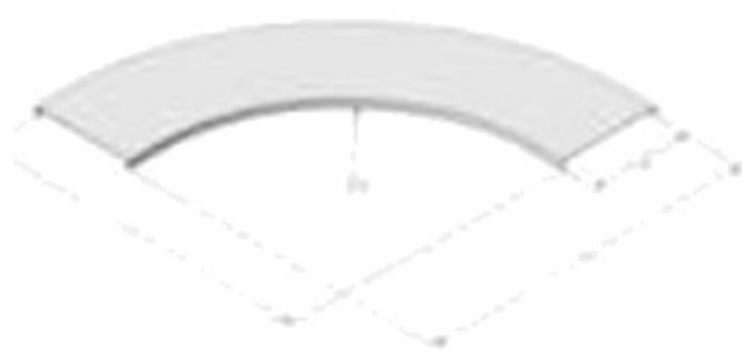


Cover clamp for fixing cover

Cable Ladder covers

Steel - Stain less Steel - Aluminum

All properties of cover are the same of its cover of straight element.



Horizontal elbow 90° cover
(HE90CLC)



Horizontal elbow 45° cover
(HE45CLC)



Vertical inside elbow 90° cover
(VIE90CLC)



Vertical inside elbow 45° cover
(VIE45CLC)



Vertical outside elbow 90° cover
(VOE90CLC)



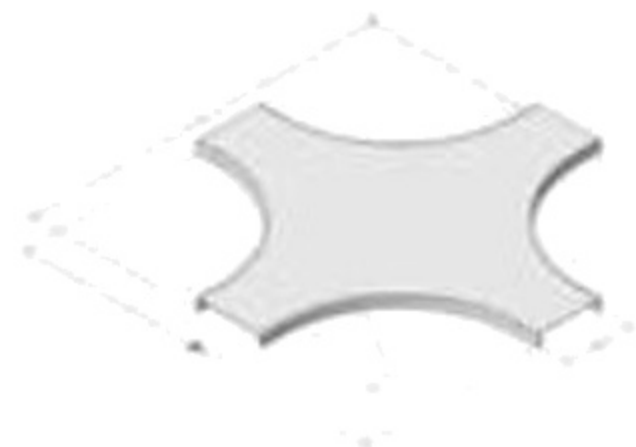
Vertical outside elbow 45° cover
(VOE45CLC)



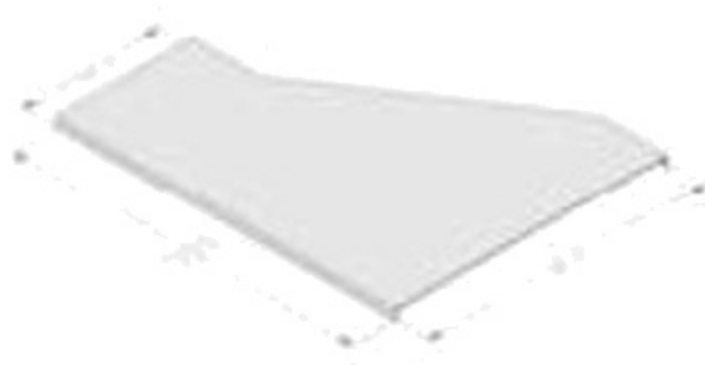
Horizontal Tee cover
(HTCLC)



Vertical Tee cover
(VTCLC)



Horizontal Cross cover
(HCCLC)



Horizontal Left Reduce cover
(HLRCLC)



Horizontal Center Reduce cover
(HCRCLC)



Horizontal Right Reduce cover
(HRRCLC)

Accessories

Steel - Stain less Steel - Aluminum

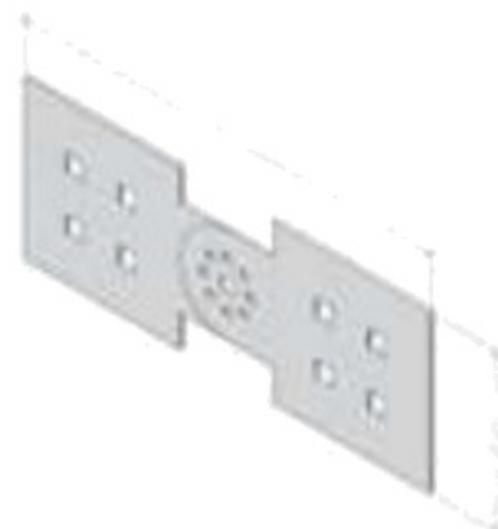
All properties of cover are the same of its cover of straight element.



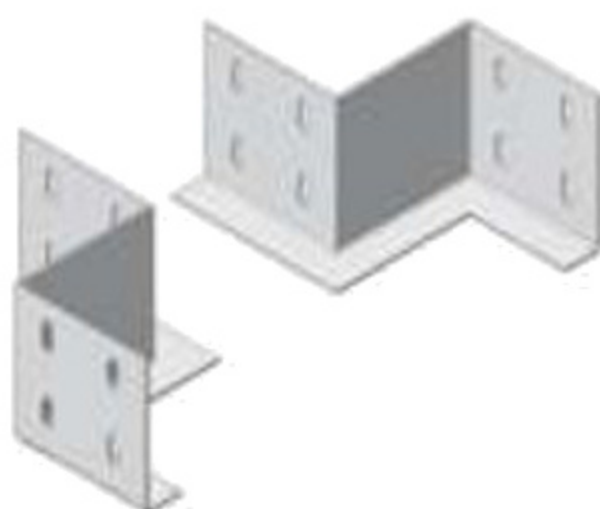
Splice plate (internal & External)



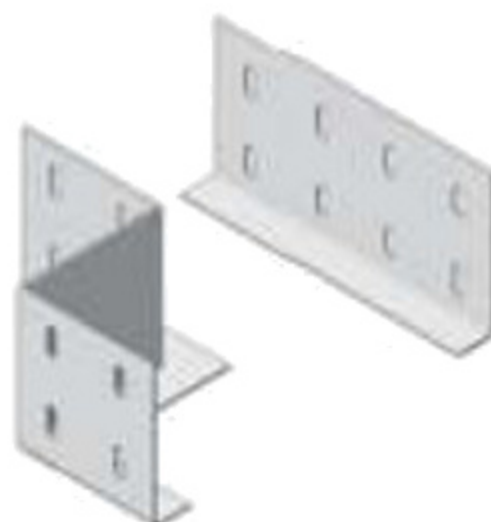
Horizontal Adjustable joint



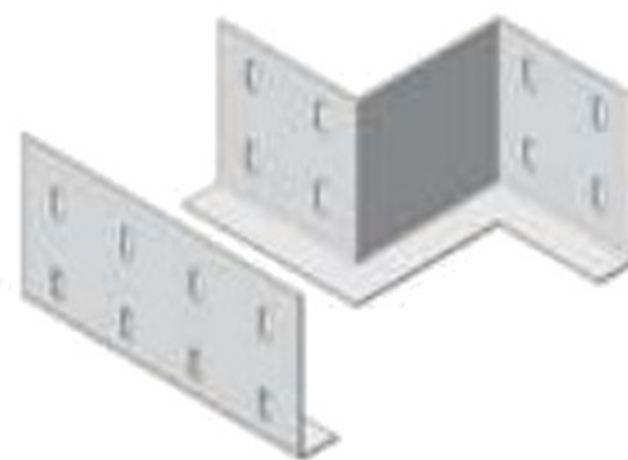
Vertical Adjustable joint



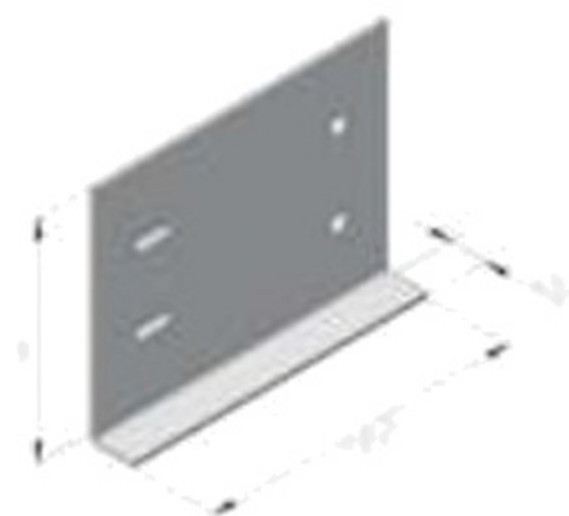
Center Reducing splice plate



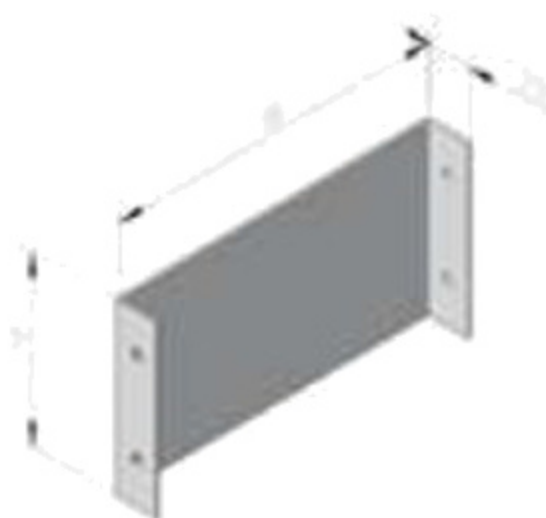
Right Reducing splice plate



Right Reducing splice plate



Expansion splice plate



Blind end



Straight Element Separator



Horizontal Elbow Separator



Vertical inside Separator

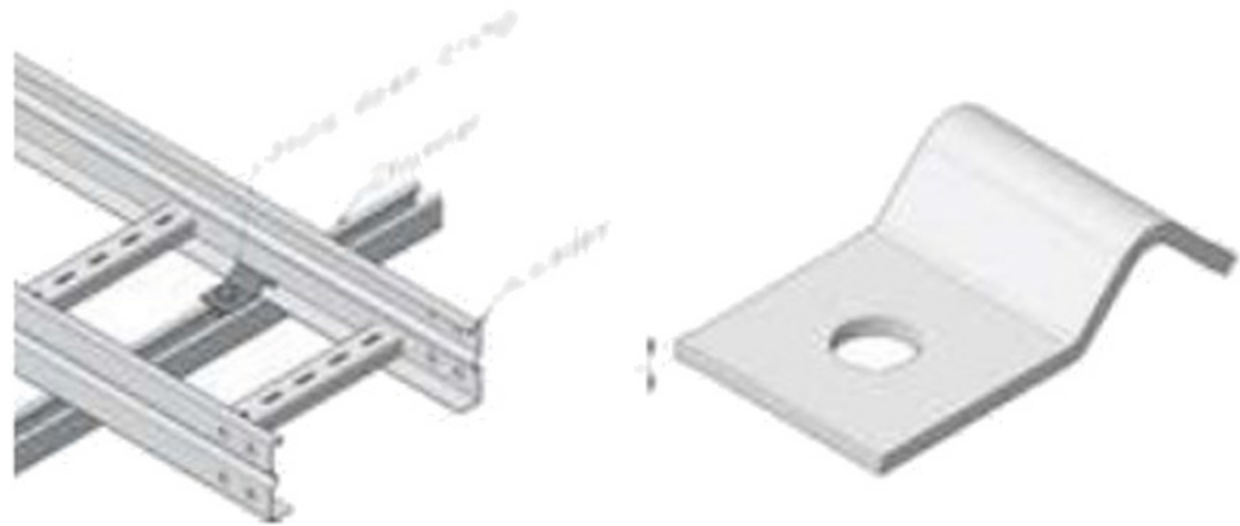


Vertical outside Separator

Cable tray Ladder

All properties of cover are the same of its cover of straight element.

Hold down clamp



Drop Out



Bonding Jumper

Dimension	Length
copper wire 16 mm diameter	250





المصرية الألمانية
لتشكيل المعادن

Cable tray Trough



المصرية الألمانية
لتشكيل المعادن



Cable tray Trough

Cable tray trough type

Steel - Stainless Steel

Light Duty

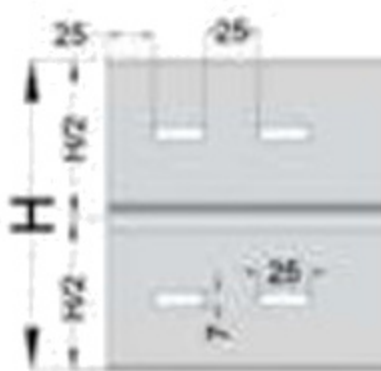


Heavy Duty

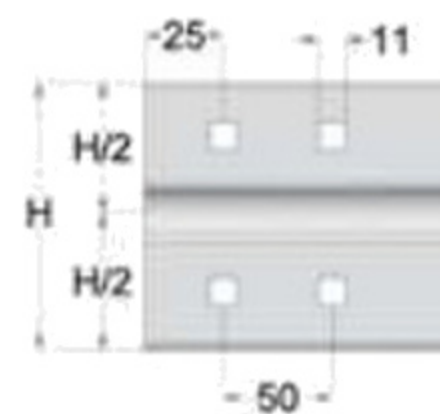


Ladder side & Bolts

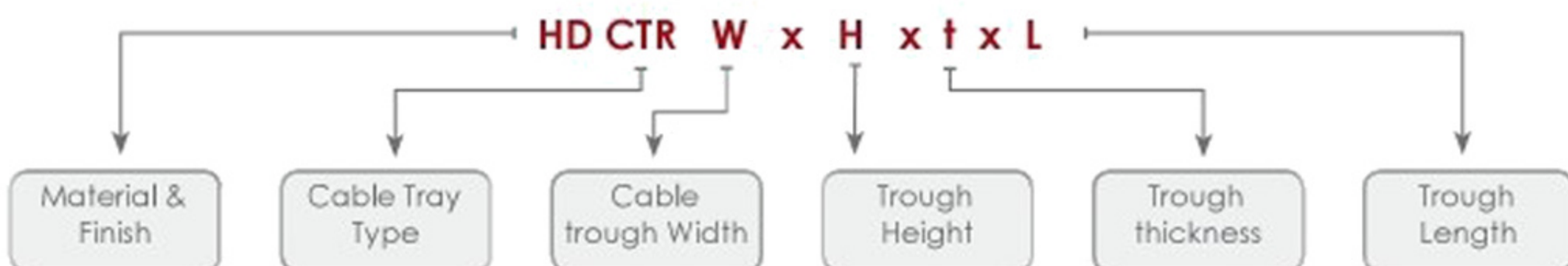
Bolt size 6 mm x 20
8 mm x 25



Bolt size 8 mm x 25
10 mm x 30



Example of order



Material & Finish

Steel

HD Hot dip galvanized after fabrication according to ASTM A 123

PG Pre galvanized according to ASTM A 653SS

EP Electro plated after fabrication ASTM B 633

EC Epoxy coated

Stainless Steel

SS 304 stainless steel 304

SS 304L stainless steel 304L

ASTM A240

SS 316 stainless steel 316

SS 316L stainless steel 316L

Cable tray type

Cable tray type CTR = cable trough

Cable tray width

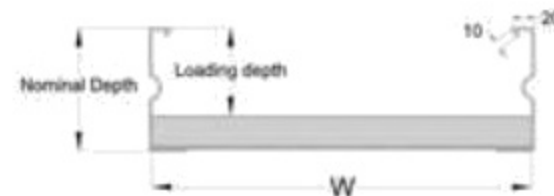
Cable trough width $W = (100 - 200 - 300 - 400 - 500 - 600 - 700 - 800 - 900 - 1000 - 1200)$ mm

Cable tray height

Cable tray trough type height

$H = (60 - 100 - 125 - 150 - 175 - 200)$ mm

Loading Depth = Nominal Depth - C (Rung height)



Side flange

Side flange standard value is 20 x 10 mm

Trough thickness

Light duty trough thickness 1.5 mm.

Heavy duty trough thickness $t = 2$ mm (sides only).

Trough length

Trough standard length $L = 2000$ & 3000 & 6000 mm.

Bolt size

Bottom thickness 1.5 mm

Bottom welded on side

Steel welded with CO_2

Stainless steel welded with argon as inert gas



Cable tray Trough type

Straight Element - Steel - Stainless Steel

Available Sizes

Width (W)	Height (H)	Thickness (T)	Length (L)
100	125	1.5 & 2	2000 & 3000 & 6000
200			
300			
400			
500			
600			
700			
800			
900			
1000			
1200			
200	150 & 175 & 200	1.5 & 2	2000 & 3000 & 6000
300			
400			
500			
600			
700			
800			
900			
1000			
1200			



Example for order.

HD CTR 300x150 x 2x6000

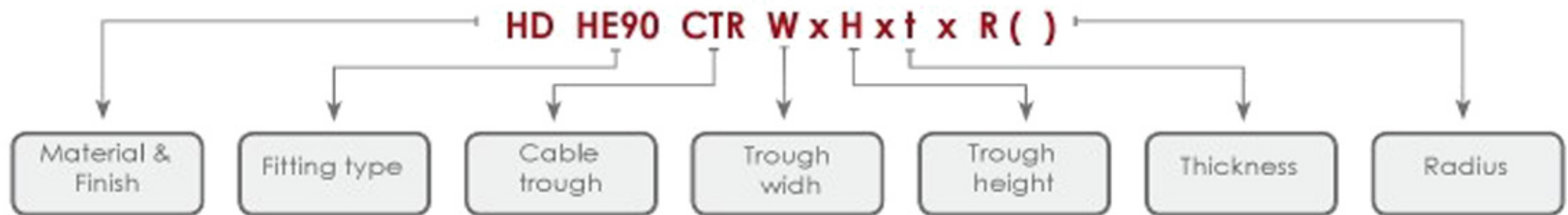
Hot dip galvanized after fabrication cable tray Trough type, 300 mm width, 150mm side height, 2mm thickness, 6000 mm length, bottom thickness 1.5 mm rungs size 70x25mm spacing 300 mm from center

Cable tray trough type (Fitting)

Steel - Stainless steel

All Cable trays trough type fitting has the same properties of its cable trough
In (size - thickness - finish).

Example



HD HE90 CTR W x H xt x RO

HE90: Horizontal Elbow 90°

HE45: Horizontal Elbow 45°

HT: Horizontal Tee.

HC: Horizontal Cross.

HRR: Horizontal Right Reducer.

HCR: Horizontal Center Reducer.

HLR: Horizontal Left Reducer.

VEI90: Vertical Elbow 90 Inside

VEO90: Vertical Elbow 90 Outside.

VE145: Vertical Elbow 45 Inside.

VE045: Vertical Elbow 45 Outside.

VT: Vertical Tee.

Radius:

Standard value of fitting radius is:

300 mm for width up to 300 mm & 600 mm for width from 400mm up to 1000 mm.

other radius can be manufactured up on request (500-900-1200).

Example for order.

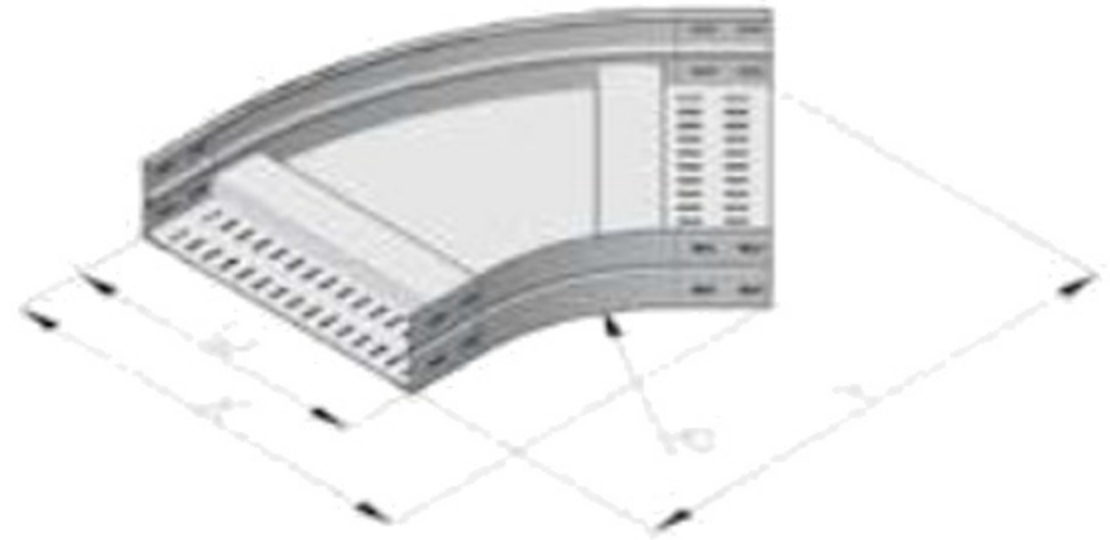
HD HE90 CTR 300x100x2

Hot dip galvanized after fabrication horizontal Elbow 90° for cable trough 300 mm width,
100 mm side height,

2mm thickness bottom thickness 1.5 mm rungs size 70x25 mm, rung spacing 300 mm.

HORIZONTAL ELBOW - 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	259	454	300
200		358	524	
300		458	595	
400		446	878	
500		747	949	
600	To	846	1020	600
700	200	946	1090	
800		1046	1160	
900		1146	1231	
1000		1246	1302	



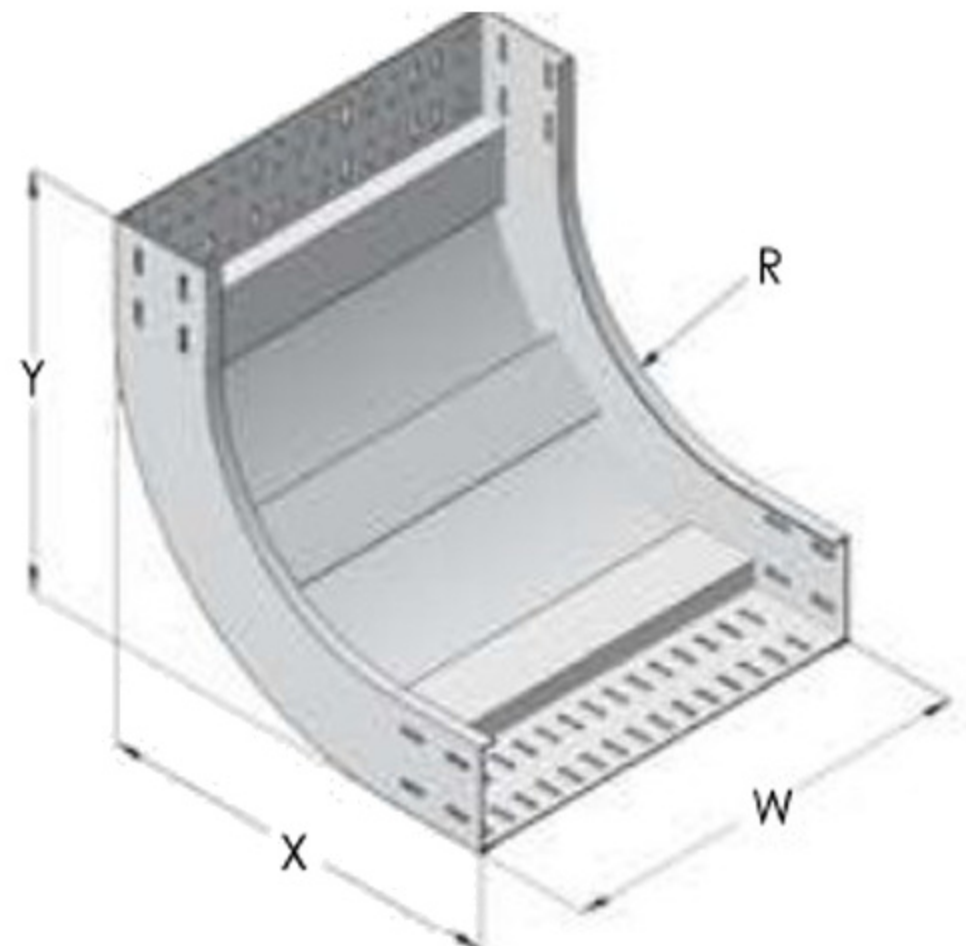
Example for order.

HD HE45 CTR 400x100x2

Hot dip galvanized after fabrication horizontal Elbow 45° for cable trough 400 mm width 100 mm side height, 2 mm thickness bottom thickness 1.5 mm rungs size 70x25 mm, rung spacing 300 mm.

VERTICAL INSIDE ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	460	460	300
	100	500	500	
	To	150	550	
	175	575	575	
300	200	747	949	
	60	460	460	600
400	100	500	500	
	To	150	550	
1000	175	575	575	
	200	1246	1302	



Example for order

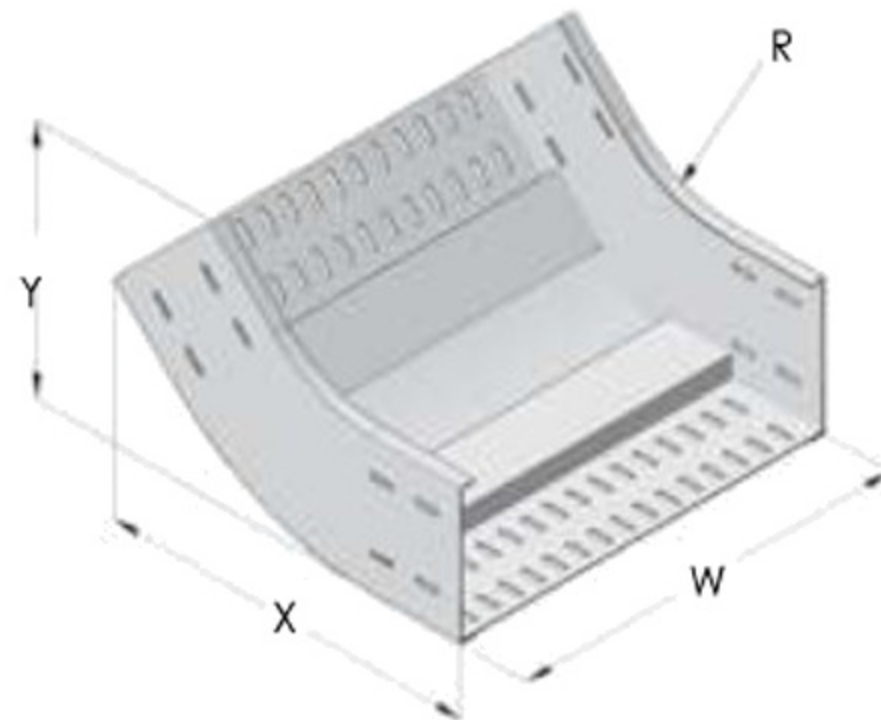
SS316 VEI90 CL 400x100x2

Stainless steel 316 Vertical Elbow inside 90° for cable trough 400 mm width, 100 mm side height, 2mm thickness

bottom thickness rung size 70x25mm, rang spacing 300 mm.

VERTICAL INSIDE ELBOW - 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	425	221	300
	100	454	259	
To	150	489	309	
	175	507	334	
300	200	747	949	600
	60	637	425	
400	100	666	454	
	150	701	489	
To	175	718	422	
	200	1246	1302	



EXample for order

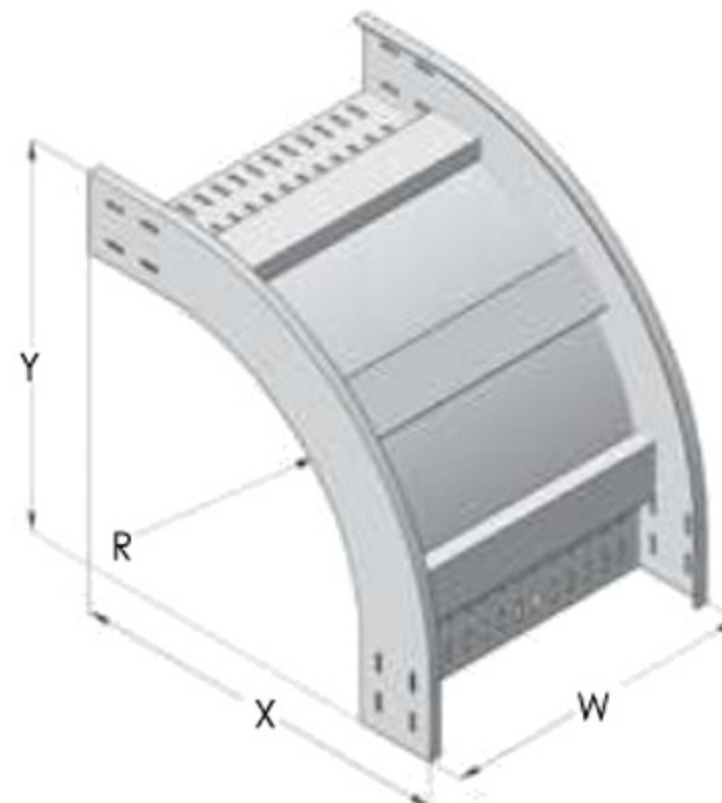
PG VEI45 CTR 200x60x2

Pre galvanized Vertical Elbow inside 45° for cable trough 200 mm width 60 mm side height, 2mm thickness. bottom thickness 1.5 mm rung size 70x25mm,rung spacing 300.

VERTICAL OUTSIDE ELBOW - 90°

VERTICAL OUTSIDE ELBOW - 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	460	460	300
	100	500	500	
To	150	550	550	
	175	575	575	
300	200	747	949	600
	60	460	460	
400	100	500	500	
	150	550	550	
To	175	575	575	
	200	1246	1302	



Example Description

Example for order.

HD VE090 CTR 400x100x2

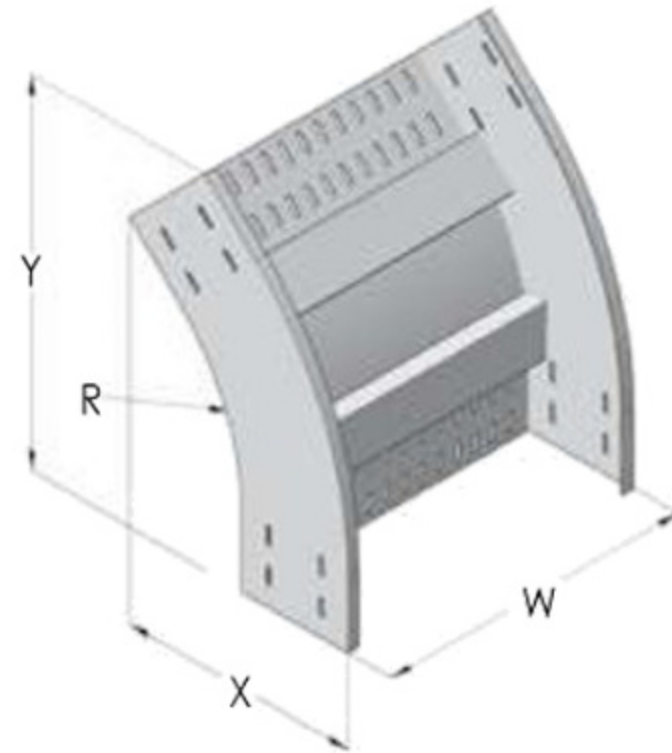
Hot dip galvanized after fabrication Vertical Elbow outside 90° for cable trough 400 mm width 100 mm side height, 2 mm thickness bottom thickness 1.5 mm rung size 70x25mm,rung spacing 300 mm.

VERTICAL OUTSIDE ELBOW - 45°

VERTICAL OUTSIDE ELBOW - 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	425	221	300
	100	454	259	
	To	489	309	
	175	507	334	
300	200	747	949	600
	60	637	425	
400	100	666	454	
	To	701	489	
1000	175	718	422	
	200	1246	1302	

Emeco Description

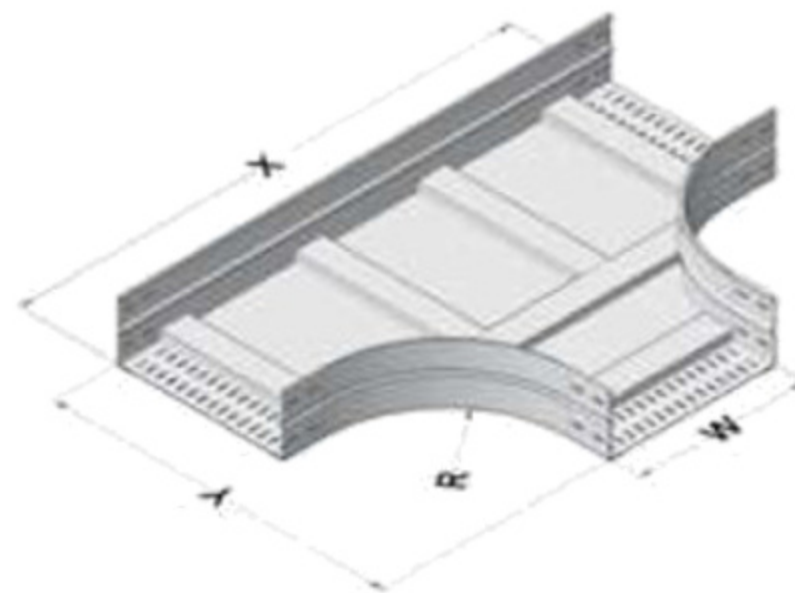


EXample for order HD VE045 CTR 200x60x2

Hot dip galvanized after fabrication Vertical tee for cable trough 200 mm width 100 mm side height, 2mm thickness. Bottom thickness 1.5 mm Rung size 70x25mm, rung spacing 300

HORIZONTAL TEE

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100/ 100/ 100	60	900	500	300
200/ 200/ 200		1000	600	
300/ 300/ 300		1100	700	
400/ 400/ 400		1800	1100	
500/ 500/ 500	To	1900	1200	600
600/ 600/ 600		2000	1300	
700/ 700/ 700		2100	1400	
800/ 800/ 800		2200	1500	
900/ 900/ 900	200	2300	1600	
1000/ 1000/ 1000		2400	1700	

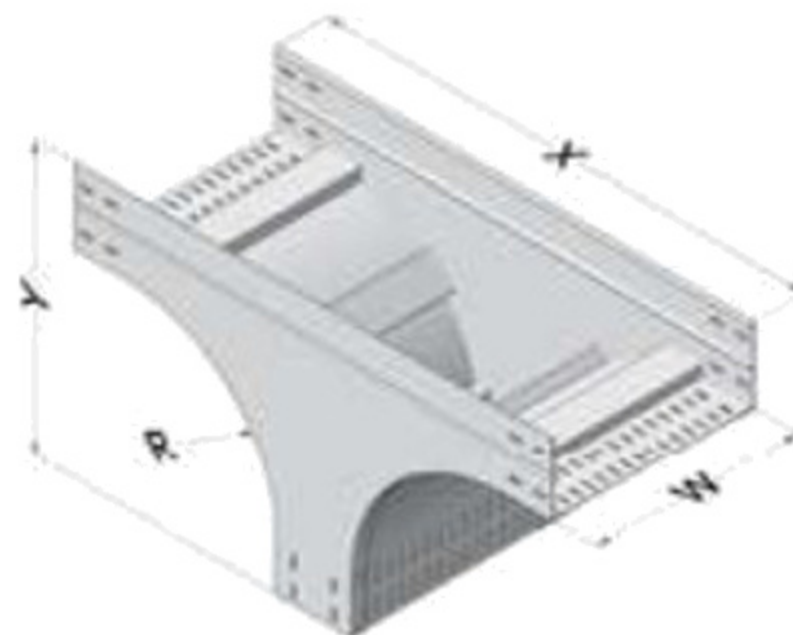


Example for order. HD HT CTR 300x100x2

Hot dip galvanized after fabrication Horizontal Tee for cable trough 300 mm width, 100 mm side height, 2mm thickness. Bottom thickness 1.5 mm Rung size 70x25mm rung spacing 300.

VERTICAL TEE

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100	60	860	460	300
	100	900	500	
	150	950	550	
To	175	507	334	
	200	747	949	
300	60	1460	760	600
400	100	1500	800	
	150	1550	850	
To	175	718	422	
1000	200	1246	1302	



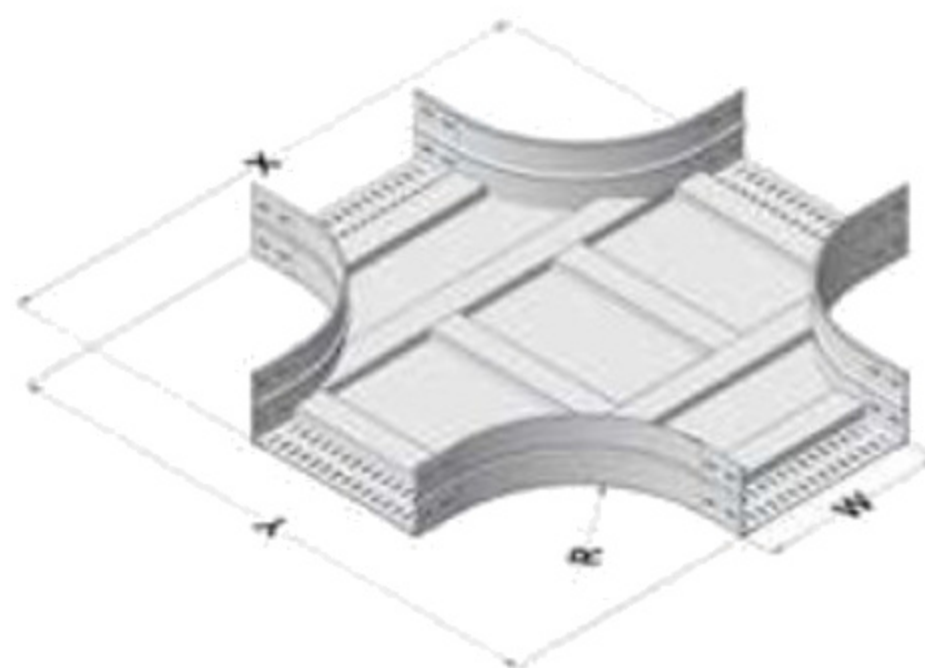
Example for order

HD VT CTR 300x100x2

Hot dip galvanized after fabrication Vertical Elbow outside 45° for cable trough 200 mm width, 60 mm side height, 2mm thickness. bottom thickness 1.5 mm Rung size 70x25mm, rung spacing 300.

HORIZONTAL CROSS

Width (W)	Height (H)	(X)	(Y)	Radius (R)
100 / 100/ 100/ 100	60	900	500	300
200/ 200/ 200/ 200		1000	600	
300/ 300/ 300/ 300		1100	700	
400/ 400/ 400/ 400	To	1800	1100	600
500/ 500/ 500/ 500		1900	1200	
600/ 600/ 600/ 600		2000	1300	
700/ 700/ 700/ 700	200	2100	1400	
800/ 800/ 800/ 800		2200	1500	
900/ 900/ 900/ 900		2300	1600	
1000 /1000/ 1000/ 1000		2400	1700	

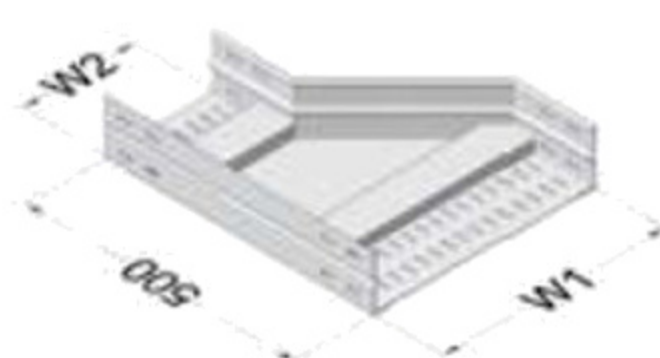


Example for order.

HD HC CTR 300x100x2

Hot dip galvanized after fabrication Horizontal Cross for cable trough 300 mm width, 100 mm side height 2mm thickness. Bottom thickness 1.5 mm Rung size 70x25mm, rung spacing 300.

HORIZONTAL REDUCER



LEFT HAND REDUCER



CENTER REDUCER



RIGHT HAND REDUCER

REDUCER LENGTH L = 500 mm

Cable Trough covers

Steel - Stain less Steel

All properties of cover are the same properties of its trough.
Standard length is 2000, 3000 mm.

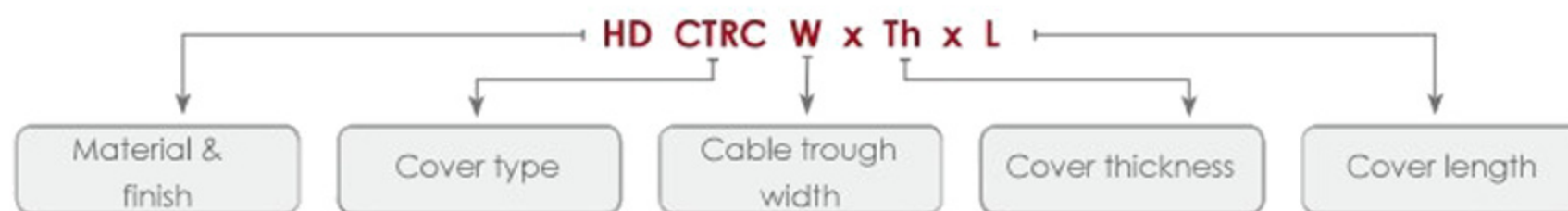


(CTRC) U cover
(Standard)



(CTRVC)
Ventilated cover

EX



Example for order (HD CTRC 200 x 1 x 3000)

Hot dip galvanized after fabrication cover for cable trough 300 mm width. 1.5 mm thickness, 3000 mm length.

Cover clamp for fixing cover

Available sizes of cover

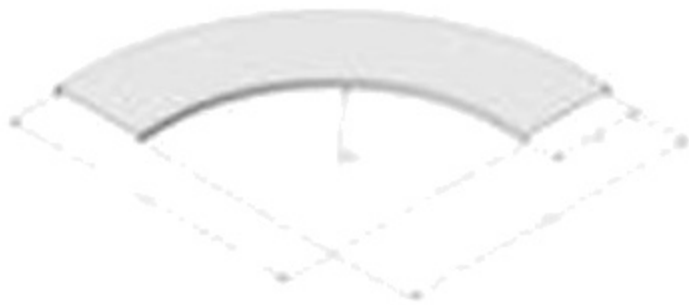
Thickness (T)	Width (W)	EMECO Description
1 To 2	50	cover 50
	100	cover100
	200	cover200
	300	cover300
1.25 To 2	400	cover 400
	500	cover 500
	600	cover 600
2	700	cover 700
	800	cover 800
	900	cover 900
	1000	cover 1000
	1200	cover 1200



Fitting Covers

Steel - Stain less Steel

All properties of cover are the same of its cover of straight element.



Horizontal elbow 90° cover
(HE90CTRC)



Horizontal elbow 45° cover
(HE45CTRC)



Vertical inside elbow 90° cover
(VIE90CTRC)



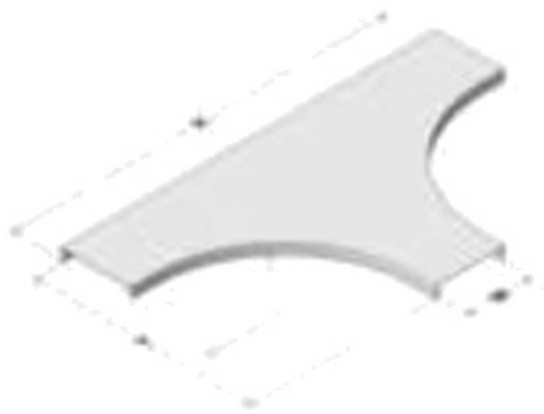
Vertical inside elbow 45° cover
(VIE45CTRC)



Vertical outside elbow 90° cover
(VOE90CTRC)



Vertical outside elbow 45° cover
(VOE45CTRC)



Horizontal Tee cover
(HTCTRC)



Vertical Tee cover
(VTCTRC)



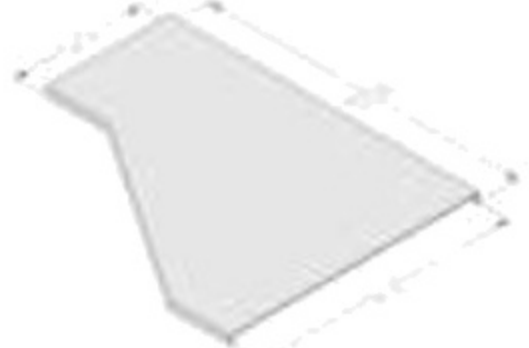
Horizontal Cross cover
(HCCTRC)



Horizontal Left Reduce cover
(HLRCTRC)



Horizontal Center Reduce cover
(HCRCTRC)

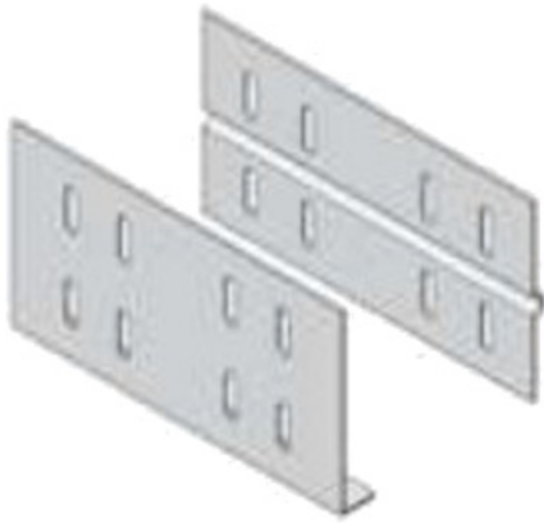


Horizontal Right Reduce cover
(HRRCTRC)

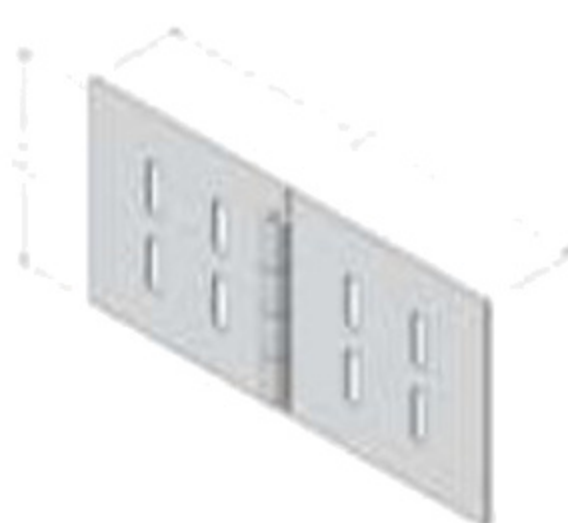
Accessories

Steel - Stain less Steel

All properties of cover are the same of its cover of straight element.



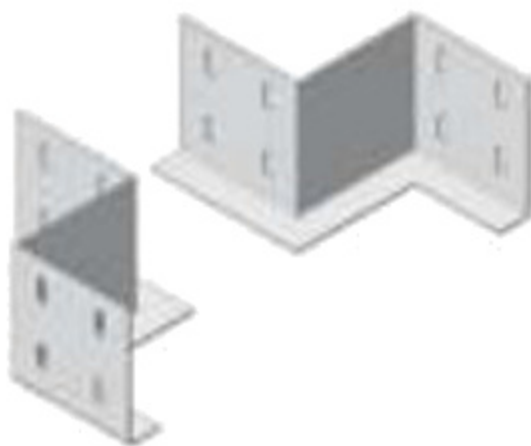
Splice plate (internal & External)



Horizontal Adjustable joint



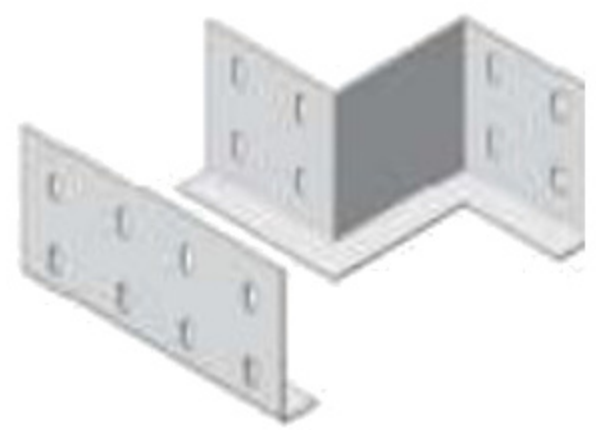
Vertical Adjustable joint



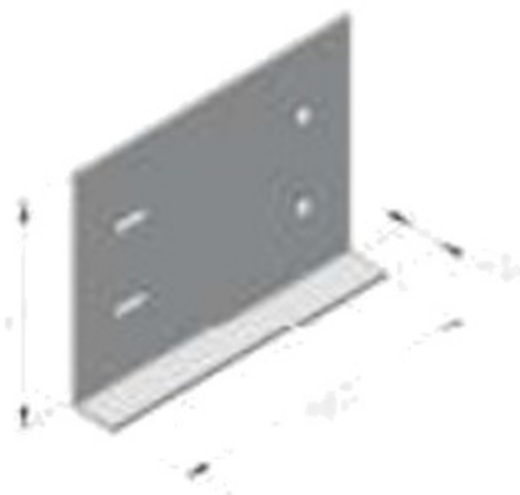
Center Reducing splice plate



Right Reducing splice plate



Right Reducing splice plate



Expansion splice plate



Blind end



Straight element Separator



Horizontal Elbow Separator



Vertical inside Separator



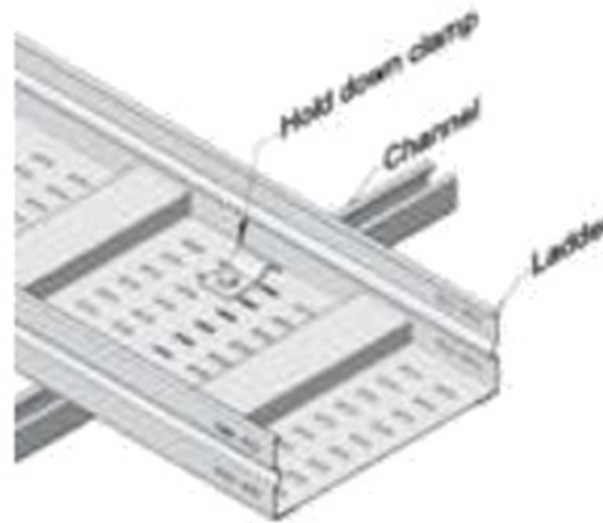
Vertical outside Separator

Accessories

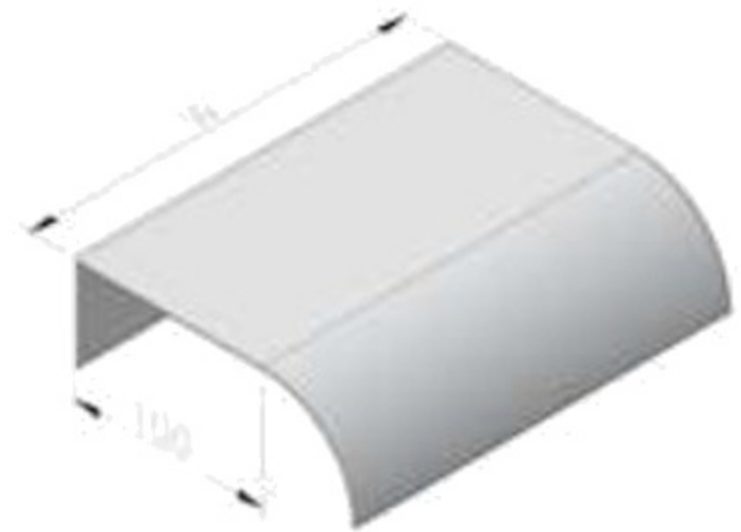
Steel - Stain less Steel

All properties of cover are the same of its cover of straight element.

Hold down clamp



Drop Out



Bonding Jumper

Dimension	Length
copper wire 16 mm diameter	250





المصرية الألمانية
لتشكيل المعادن

Cable tray channel



المصرية الألمانية
لتشكيل المعادن



Cable tray Channel type

Cable Channel

Straight Element



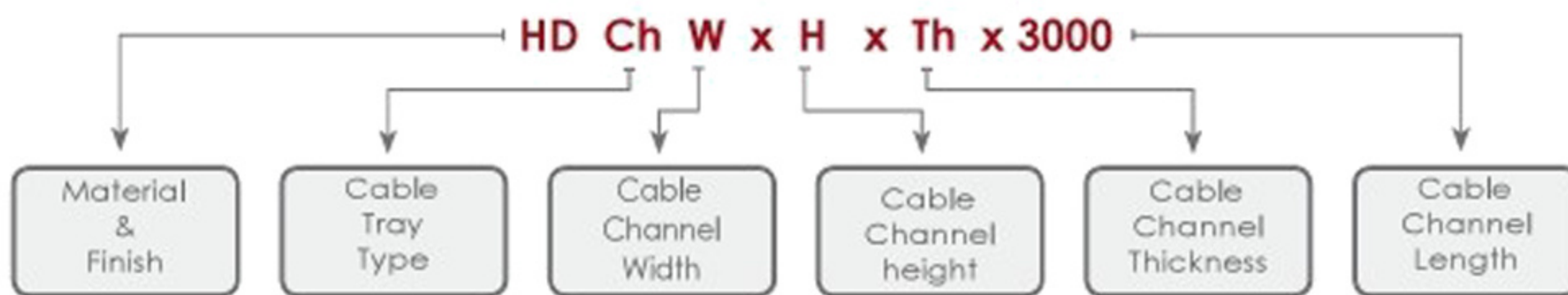
Perforated Channel tray



Solid Channel tray

Manufacture

All cable trays manufactured according to NEMA STANDARED VEL



Material & finish

HD Hot dip galvanized after fabrication, Steel 37.

PG Pre galvanized steel 37.

EP Electro plated steel 37

EC Electrostatic painted, steel 37 (Painting after HD-EP).

SS Stain less steel (ex. SS316. Stainless steel 316).

AL Aluminum

Cable tray type

Ch Cable tray Channel type.

Cable tray width

W cable Channel width (W) its value varies from 50 mm to 150 mm.

Cable tray height

H cable channel height (H) its value varies from 35 mm to 50 mm.

Cable channel thickness

I cable channel thickness value is from 1 to 2 mm.

Cable channel length

L cable tray length standard value is 2000, 3000 mm

Example of order:

HD Ch 150 x 50 x 1.5 x 3000mm.

Hot dip galvanized after fabrication cable Channel size 150 mm width, 50 mm side height, 1.5 mm thickness, 3000 mm length

Cable tray channel

Straight Element - Steel - Stainless Steel - Aluminum

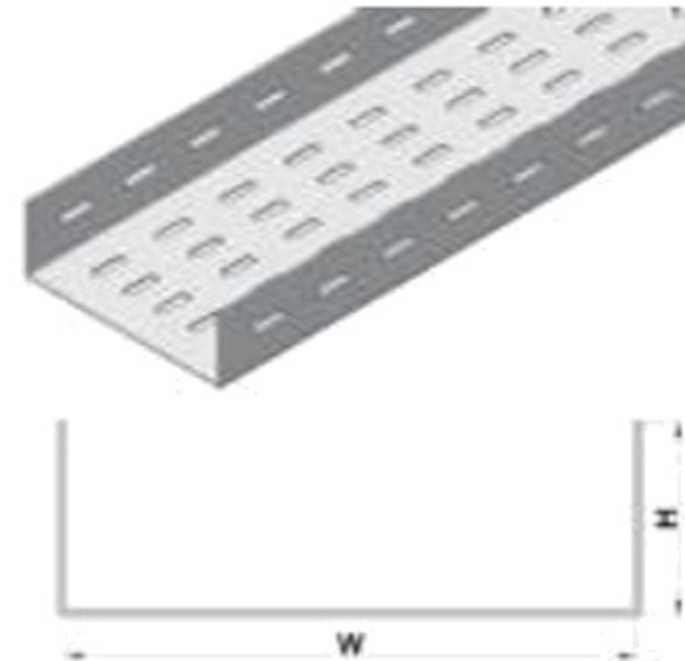
Available sizes

Width (W)	Height (H)	Thickness (T)
75	35	2 - 1.5 - 1.25 - 1
100	50	2 - 1.5 - 1.25 - 1
150	50	2 - 1.5 - 1.25 - 1

EX.

HD Ch 75 x 35 x 1.5 x 3000

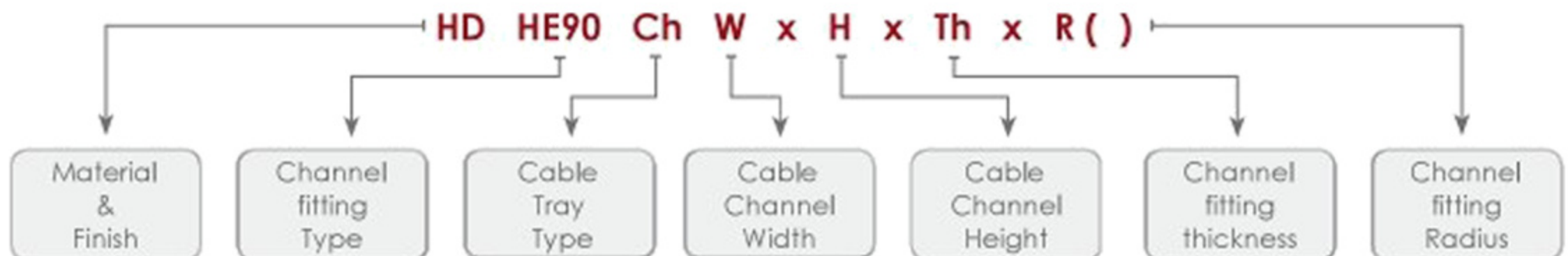
Hot dip galvanized after fabrication cable Channel size 75 mm width, 35 mm side height, 1.5 mm thickness, 3000 mm length



Cable tray channel (Fitting)

Steel - Stainless steel - Aluminum

All Cable channel fitting has the same properties of its cable tray



Fitting type means

HE90: Horizontal Elbow 90°.

HE45: Horizontal Elbow 45°.

HT: Horizontal Tee.

HC: Horizontal Cross.

HRR: Horizontal Right Reducer.

HCR: Horizontal Center Reducer.

HLR: Horizontal Lift Reducer.

VE190: Vertical Elbow 90 Inside.

VE090: Vertical Elbow 90 Outside.

VE145: Vertical Elbow 45 Inside.

VE045: Vertical Elbow 45 Outside.

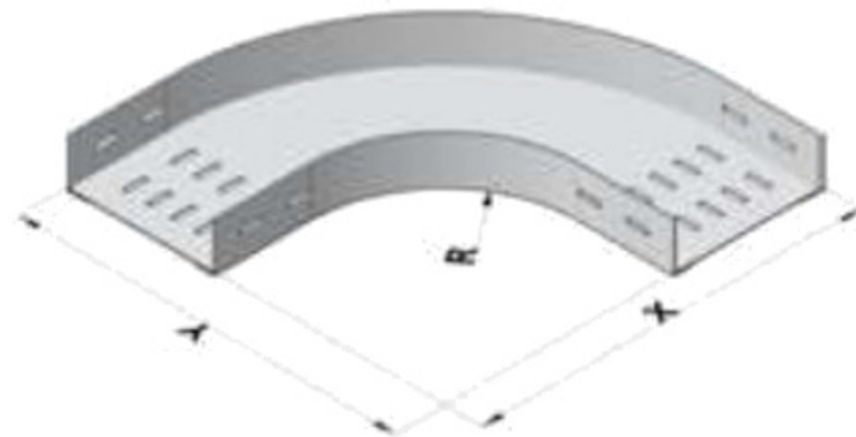
VT: Vertical Tee.

Standard radius as mention in the following table & when client want another value write it in description.

HORIZONTAL ELBOW 90°

PG HE90 Ch150 x 50 x 1.5

Width (W)	Height (H)	((X	((Y	Radius (R)
50	35	290	290	140
100	50	440	440	
150	50	490	490	



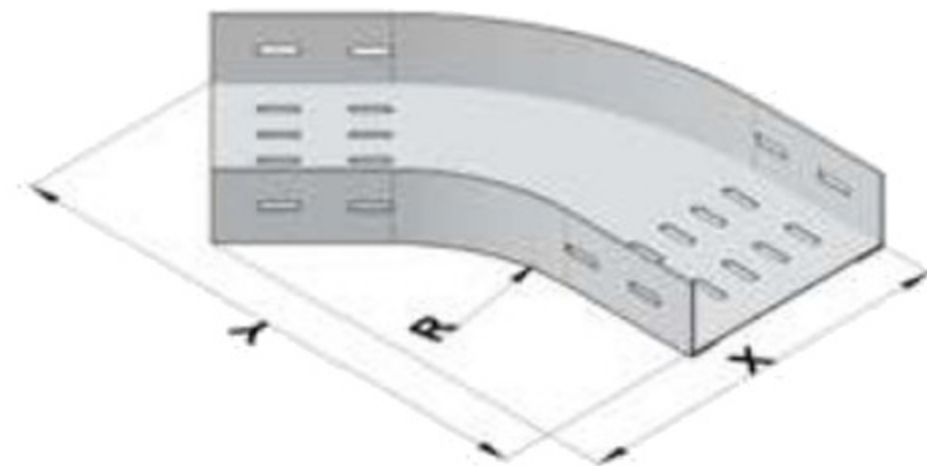
EX.

PG HE90 Ch150 x 50 x 1.5

Pre galvanized before fabrication horizontal Elbow 90° for channel 150 mm width 50mm side height, 1.5 mm thickness

HORIZONTAL ELBOW 45°

Width (W)	Height (H)	((X	((Y	Radius (R)
50	35	290	290	140
100	50	440	440	
150	50	490	490	



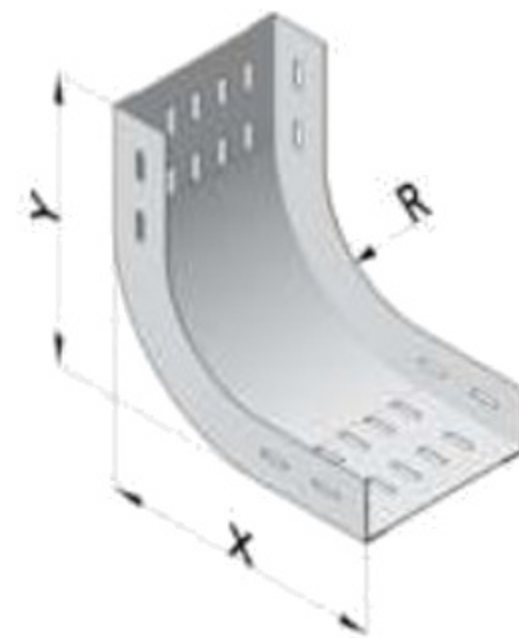
EX.

PG HE45 Ch150 x 50 x 1.5

Pre galvanized before fabrication horizontal Elbow 45° for channel 150 mm width, 50mm side height, 1.5 mm thickness.

VERTICAL INSIDE ELBOW 90°

Width (W)	Height (H)	((X	((Y	Radius (R)
50	35	290	290	140
100	50	440	440	
150	50	490	490	



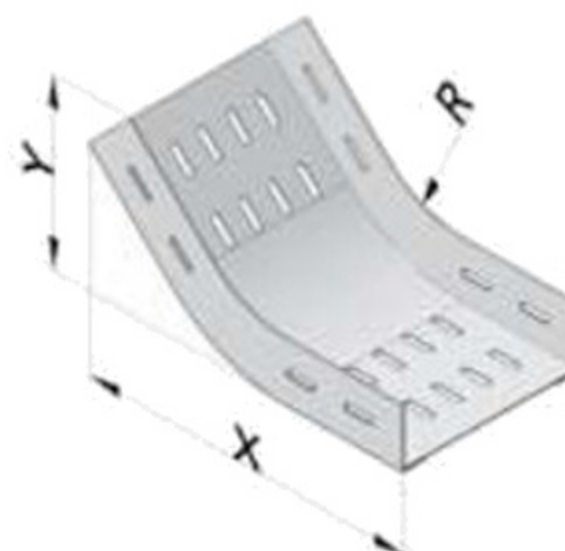
EX.

PG VE190 Ch150 x 50 x 1.5

Hot dip galvanized after fabrication vertical inside Elbow 90° for channel 150 mm width, 50mm side height, 1.5 mm thickness.

VERTICAL OUTSIDE ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	35	290	290	
100	50	440	440	140
150	50	490	490	



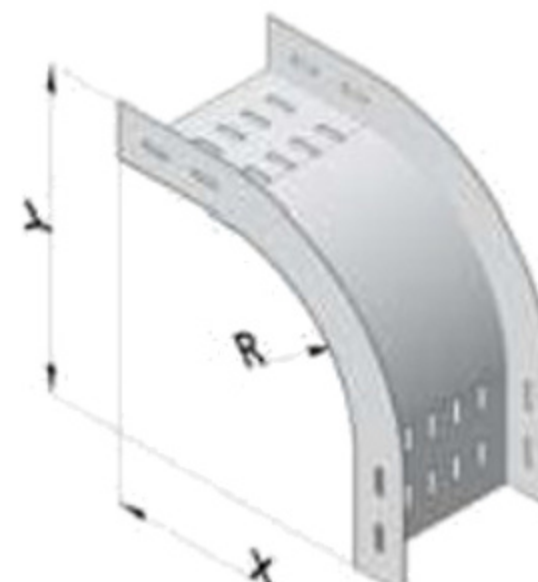
EX.

PG VE145 Ch150 x 50 x1.5

Hot dip galvanized after fabrication vertical inside Elbow 45° for channel 150 mm width, 50mm side height, 1.5 mm thickness.

VERTICAL OUTSIDE ELBOW 90°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	35	290	290	
100	50	440	440	140
150	50	490	490	



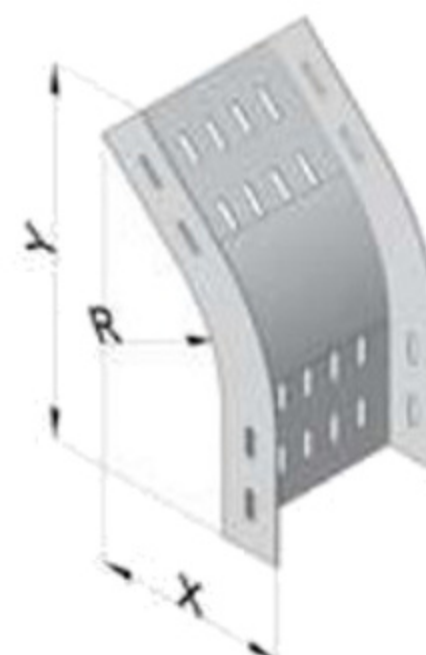
EX.

HD VEO 90 Ch150 x 50 x1.5

Hot dip galvanized after fabrication vertical outside Elbow 90° for channel 150 mm width, 50mm side height, 1.5 mm thickness.

VERTICAL OUTSIDE ELBOW 45°

Width (W)	Height (H)	(X)	(Y)	Radius (R)
50	35	290	290	
100	50	440	440	140
150	50	490	490	



EX.

HD VEO 45 Ch150 x 50 x1.5

Hot dip galvanized after fabrication vertical outside Elbow 45° for channel 150 mm width, 50mm side height, 1.5 mm thickness.

Horizontal Tee

Width (W)	Height (H)	X)	Y)	Radius (R)
50	35	290	290	140
100	50	440	440	
150	50	490	490	



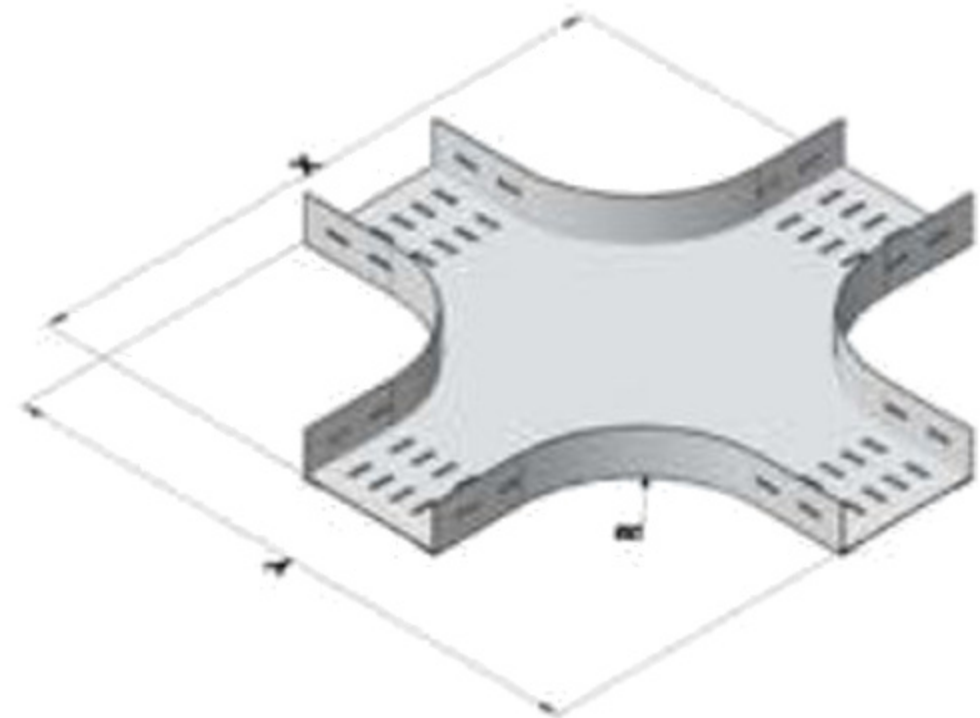
EX.

HD HT Ch150 x 50 x1.5

Hot dip galvanized after fabrication Horizontal tee for channel 150 mm width, 50mm side height, 1.5 mm thickness.

Horizontal Cross

Width (W)	Height (H)	X)	Y)	Radius (R)
50	35	290	290	140
100	50	440	440	
150	50	490	490	



EX.

HD HC Ch150 x 50 x1.5

Hot dip galvanized after fabrication Horizontal cross for channel 150 mm width, 50mm side height, 1.5 mm thickness.

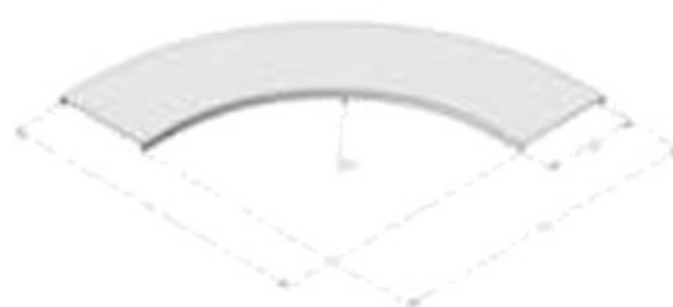
Cable channel covers

Straight & Fitting Covers

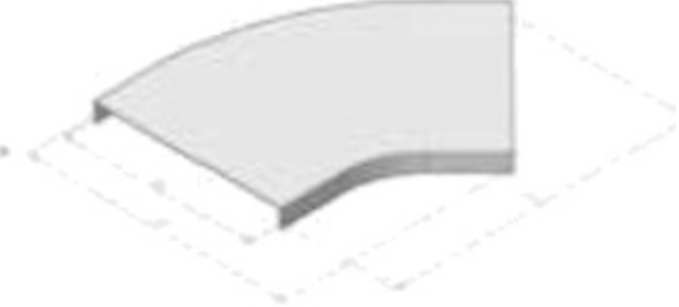
All properties of cover are the same of its cover of straight element



Horizontal elbow 45° cover
(HE45C)



Horizontal elbow 90° cover
(HE90C)



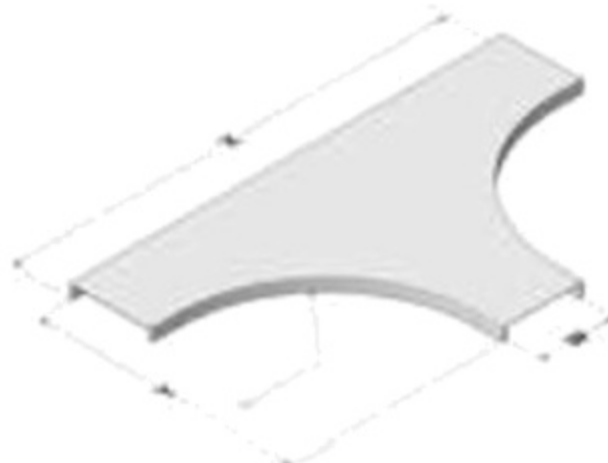
Straight cover



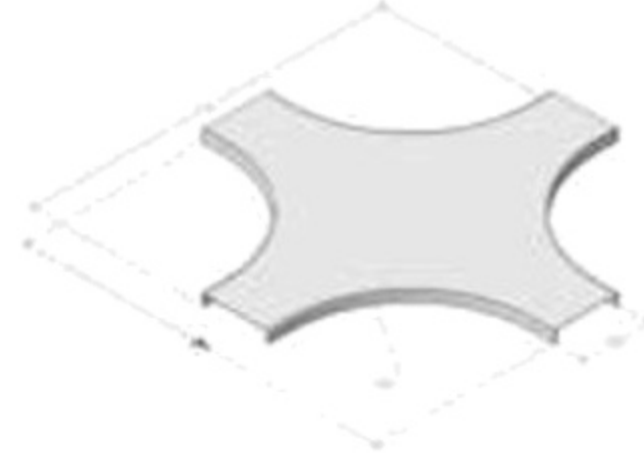
Vertical outside elbow 90° Cover
(VEO90C)



Vertical inside elbow 45° Cover
(VEI45C)



Vertical inside elbow 90° Cover
(VEI90C)



Horizontal Cross cover (HCC)



Horizontal tee cover (HTC)



Vertical outside elbow 45° Cover
(VEO45C)



Accessories



Splice plate



Horizontal Adjustable joint



Vertical Adjustable joint



المصرية الألمانية لتشكيل المعادن

HEAD OFFICE

18 Zakaria Ahmed Street - Next to El Rihani Theater - Cairo

Factory

Qalyoub - Cairo Alexandria Agricultural Road - Meet Halfa, next to Al-Nagouli Factory