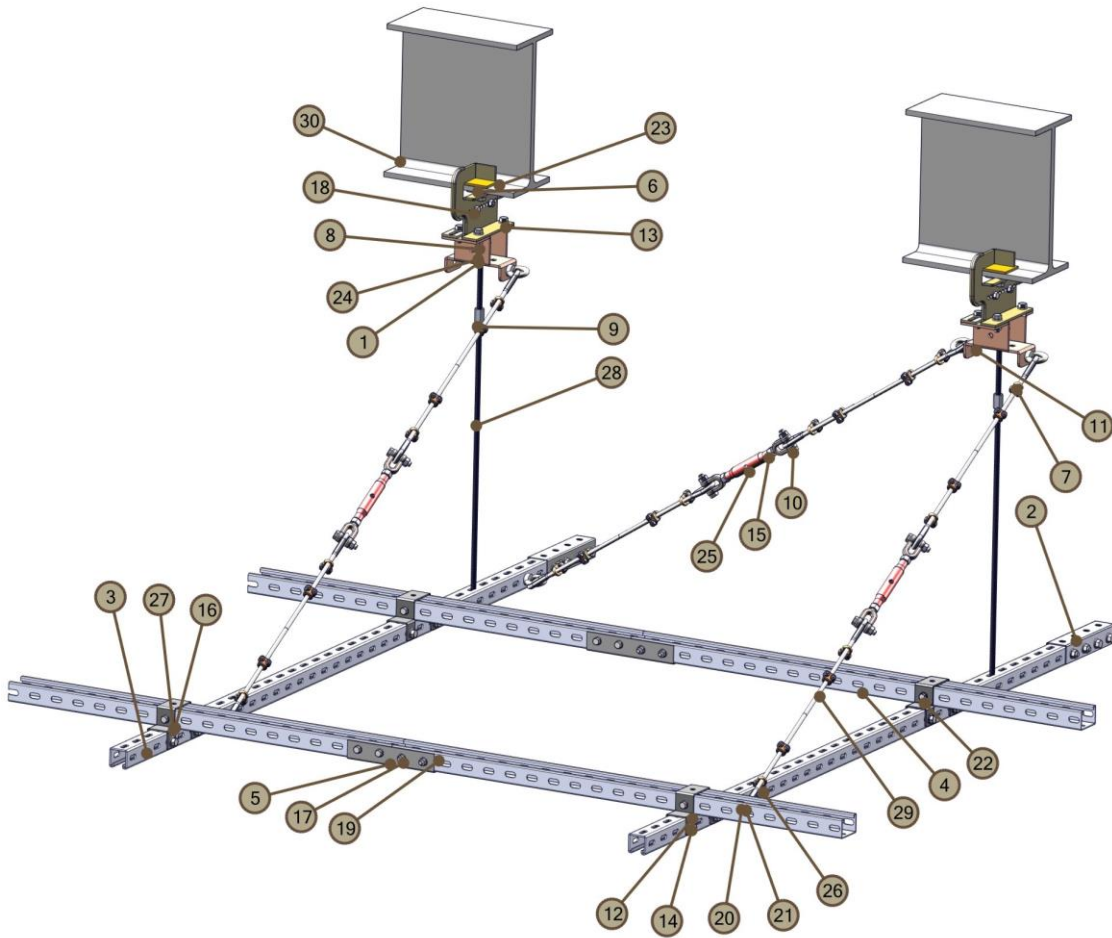


FBS SYSTEM

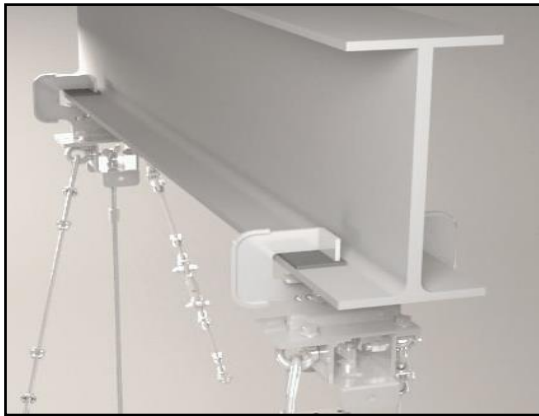
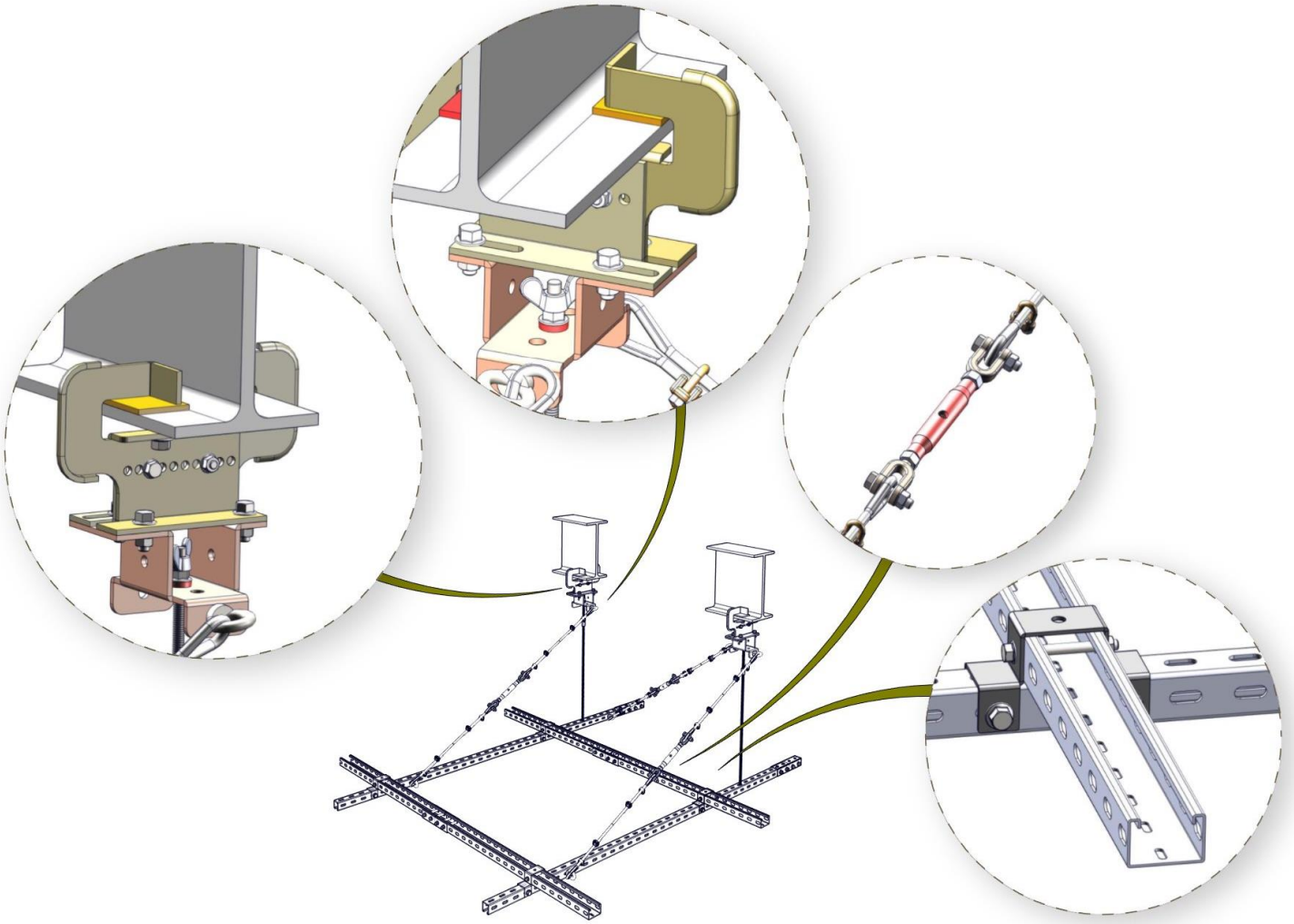
FBS SYSTEM



Description	ID
Rod Connector	1
Main Tray Joint	2
Main Tray	3
Cross Tray	4
Cross Tray Joint	5
MS Bracket To Main Steel	6
Wire Rope Grip	7
M10 Wing Nut	8
M10 Rod Joint	9
M10 Turnbuckle Bolt	10
M10 Turnbuckle Nut	11
M10 Nut	12
M10X25 Bolt	13
M10X60 Bolt	14
M12 Turnbuckle Bolt	15
M6 Flange Nut	16
M8 Flange Nut	17
M8x20 Bolt	18
M8x80 Bolt	19
M10 Eyebolt	20
M8 Thimble	21
Connector Cross to Main	22
Seismic Pad	23
Gasket	24
Turnbuckle	25
M6 Nut	26
M6x15 Bolt	27
M10 Rod	28
Steel Wire 8 mm	29
IPE Steel Beam	30

- When, due to building type, there are no suitable points to hang ceiling suspension system, FBS is right product for your project.
- FBS system can also be designed in a way to carry MEP and IT components.
- It is possible to span distance up to 8 m to create hanging points from suspension system with patented clamps.

DETAIL VIEW



MATERIAL OPTIONS

Galvanized Steel

HUMIDITY

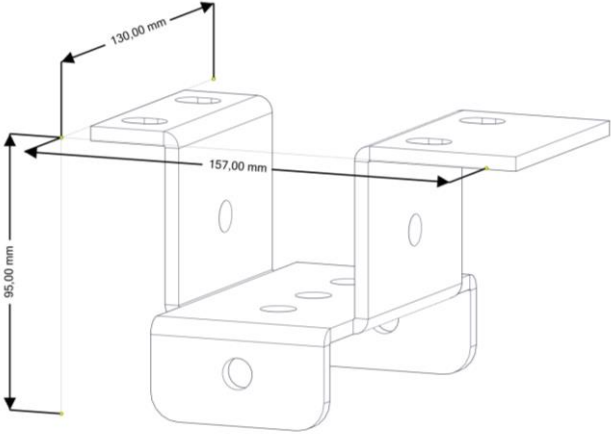
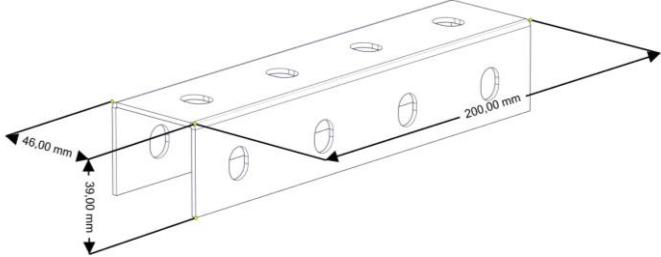
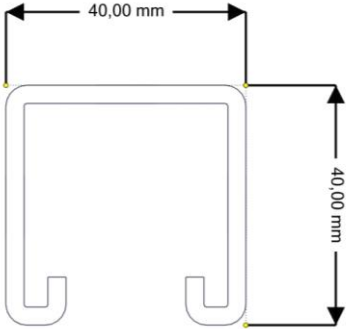
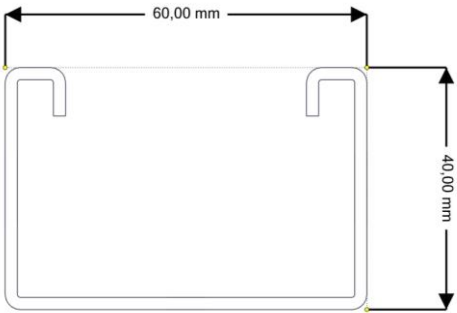
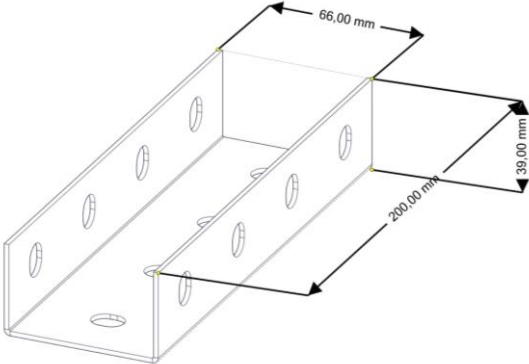
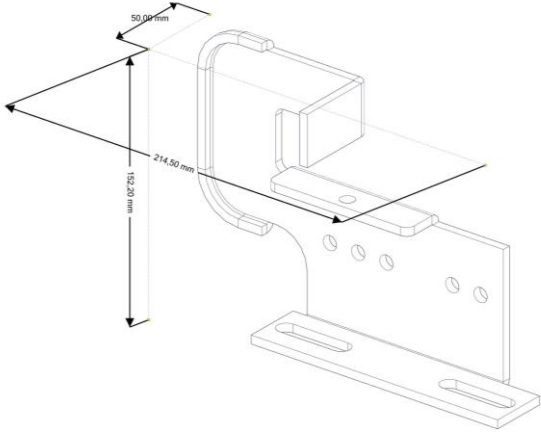
Galvanize panel: 90% RH

Aluminum panel: 100 % RH

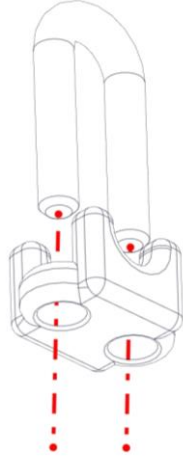
PAINT

Prior to paint. Sensitive surface cleaning and phosphate coverage is applied.60 minimum micron powder paint is sprayed by electrostatic system through 6 robots and cooked in a 180 meters long oven. The entire painting process takes place automatically by computer control.

ELEMENT SPECIFICATION

<p>1. Rod Connector</p> 	<p>2. Main Tray Joint</p> 
<p>T : 5 mm Galvanized Steel</p>	<p>T : 2 mm Galvanized Steel</p>
<p>3. Main Tray</p> 	<p>4. Cross Tray</p> 
<p>T : 3 mm Galvanized Steel L : up to 6000 mm</p>	<p>T : 2 mm Galvanized Steel L : up to 6000 mm</p>
<p>5. Cross Tray Joint</p> 	<p>6. MS Bracket to Main Steel</p> 
<p>T : 2 mm Galvanized Steel</p>	<p>T : 5 mm Galvanized Steel</p>

7. Wire Rope Grip



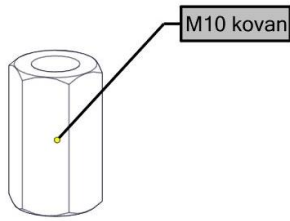
8. M10 Wing Nut



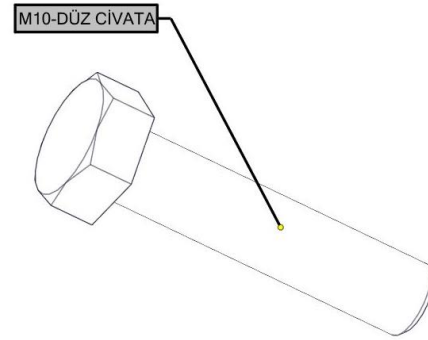
T : Galvanized Steel

T : Galvanized Steel

9. M10 Rod Joint



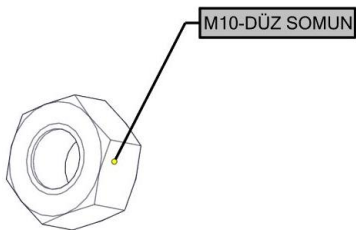
10. M10 Turnbuckle Bolt



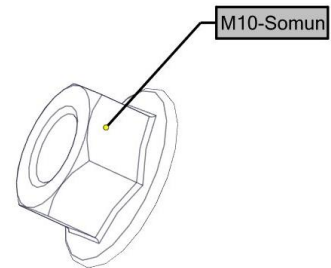
T : M10 Galvanized Steel

T : M10 Bolt Steel

11. M10 Turnbuckle Nut



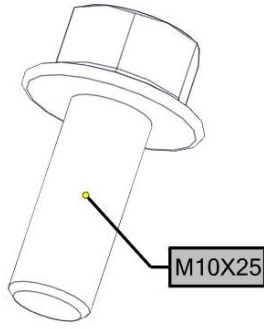
12. M10 NUT



T : M10 Nut Steel

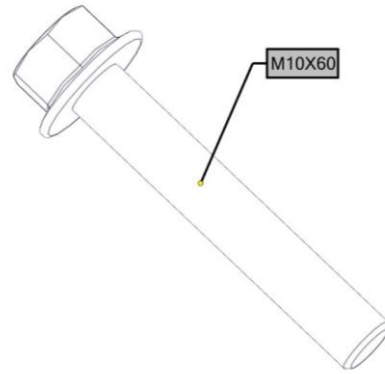
T : M10 Nut Steel

13. M10 X 25 Bolt



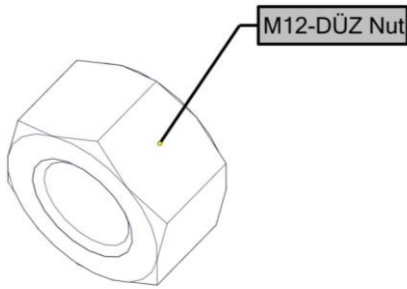
T : M10 x 25 Steel

14. M10 X 60 Bolt



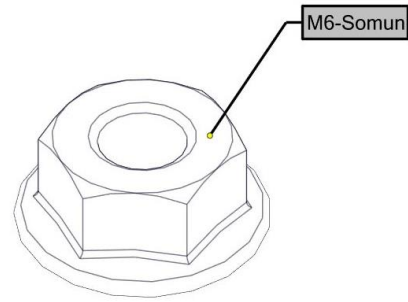
T : M10 x 60 Steel

15. M12 Turnbuckle Nut



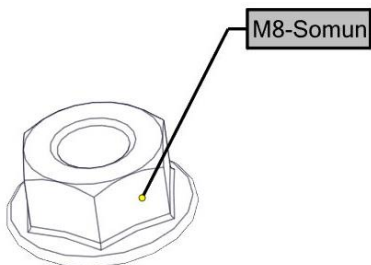
T : M12 Nut Steel

16. M6 Flange Nut



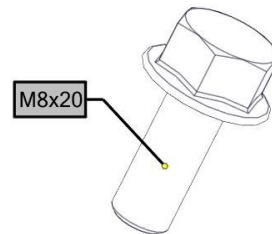
T : M6 Nut Steel

17. M8 Flange Nut



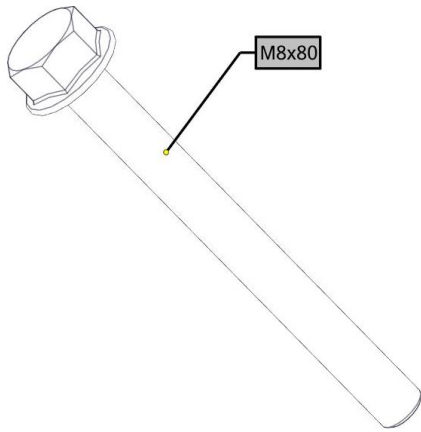
T : M8 Nut Steel

18. M8 x 20 Bolt



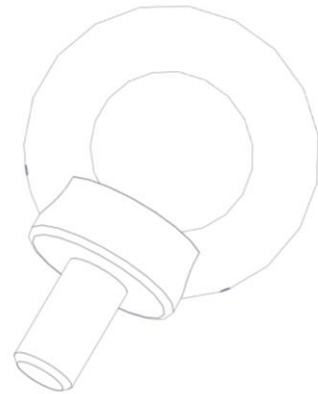
T : M8 x 20 Bolt Steel

19. M8 X 80 Steel



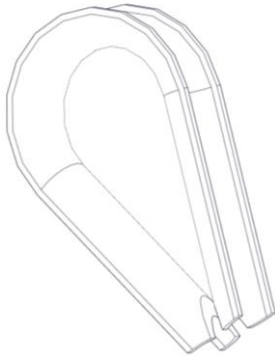
T : M8 X 80 Steel

20. M10 Eye Bolt



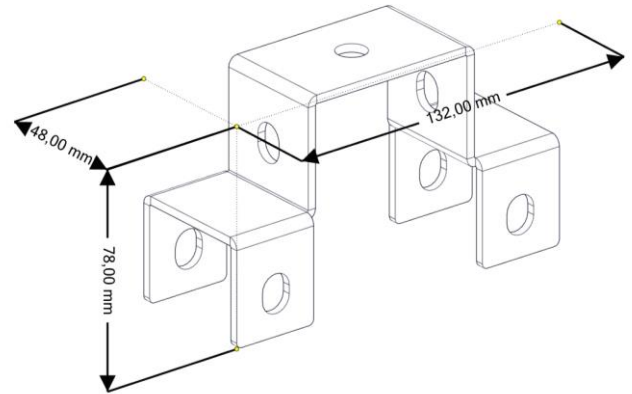
T : Steel

21. M8 Thimble



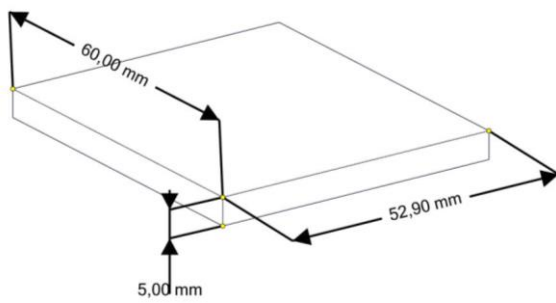
T : Galvanized Steel

22. Connector Cross to Main



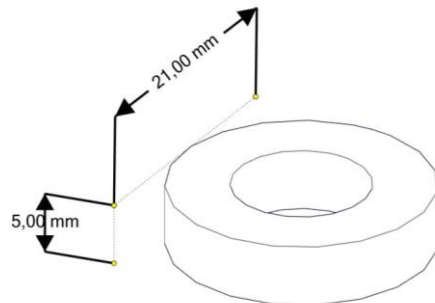
T : 2 mm Galvanized Steel

23. Seismic Pad



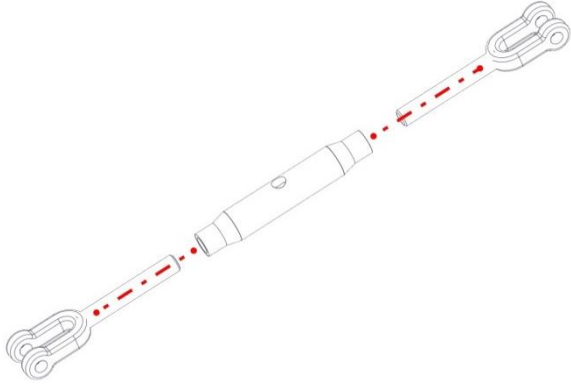
T : 5 mm Rubber

24. Gasket



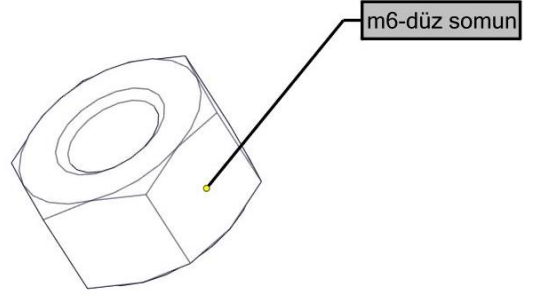
T : 5 mm Galvanized Steel

25. Turnbuckle



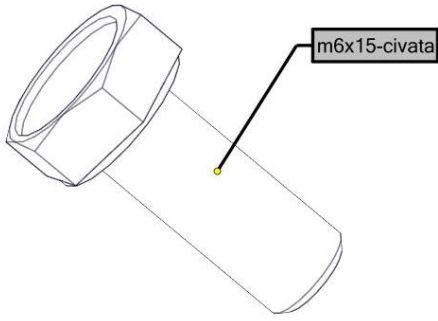
T : Galvanized Steel

26. M6 Nut



T : Hex- Nut M6 Steel

27. M6 X 15 Bolt



T : M6 X 15 Bolt Steel

28. M10 Rod



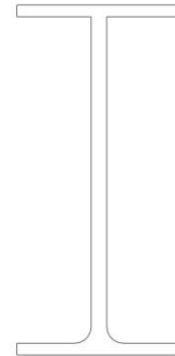
T : M10 Rod Steel

29. Steel Wire



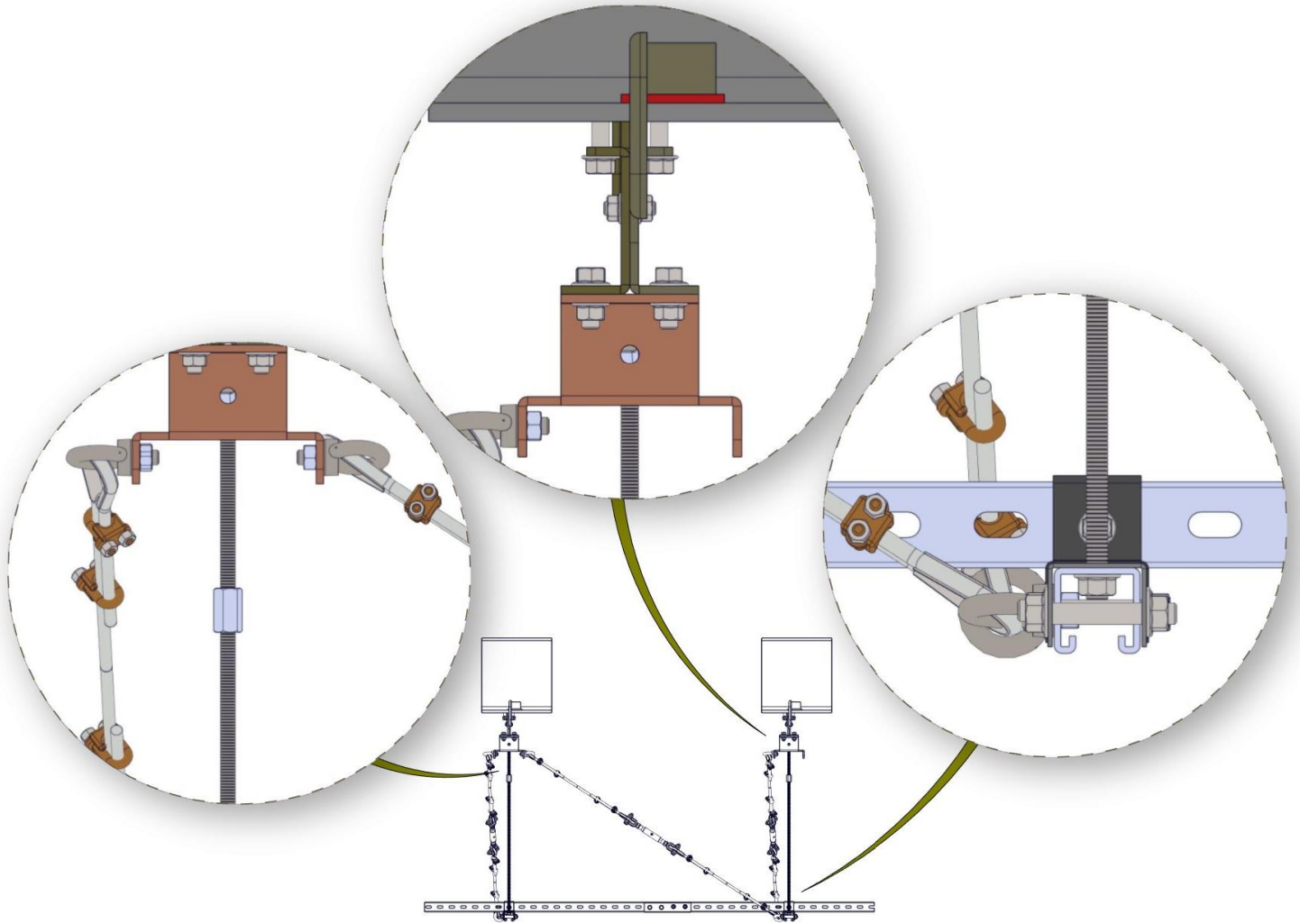
T : 8 mm Galvanized Steel

30. EXCISTING STEEL STRUCTURE



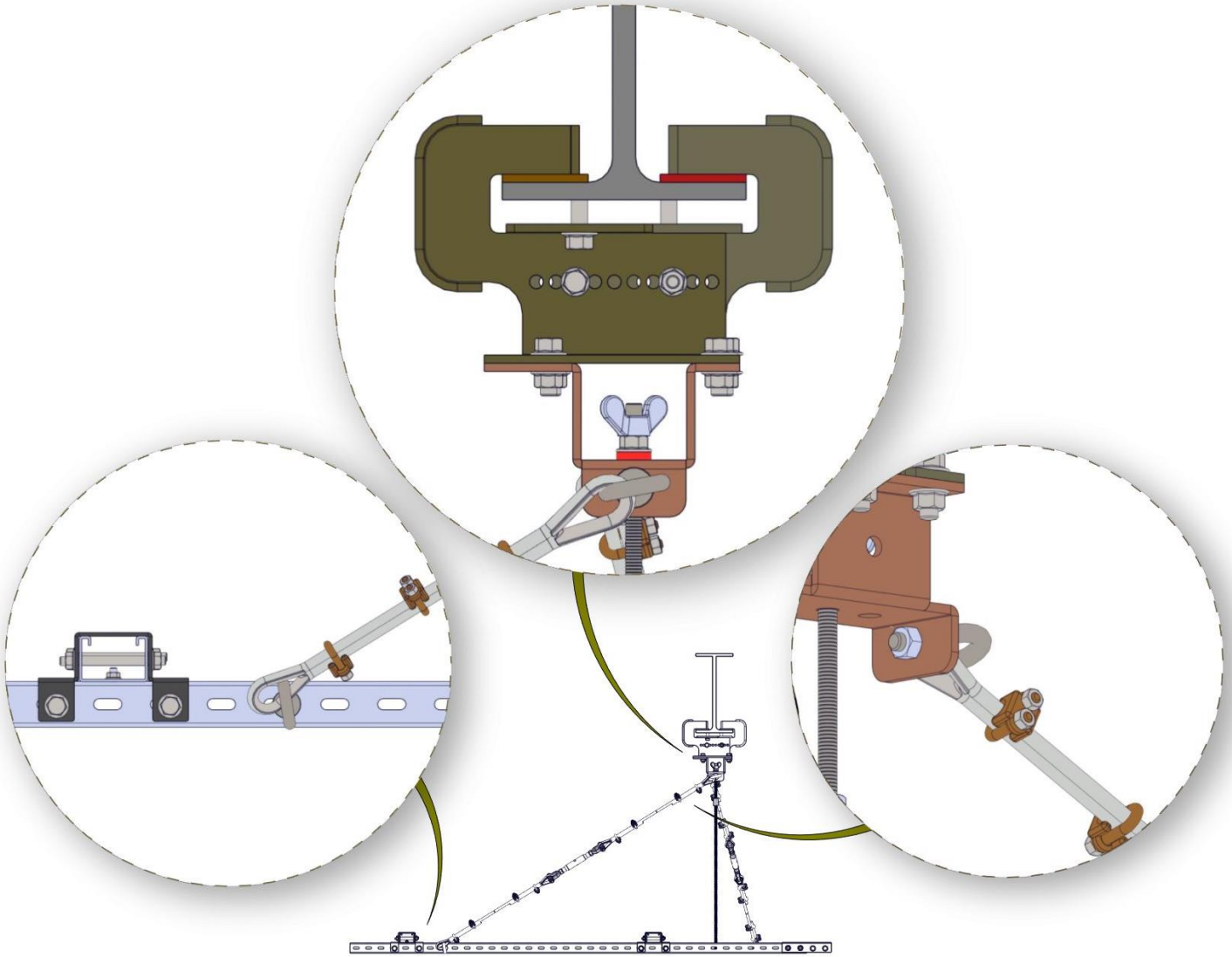
EXCISTING STEEL STRUCTURE

DETAIL SECTION



FBS System Details

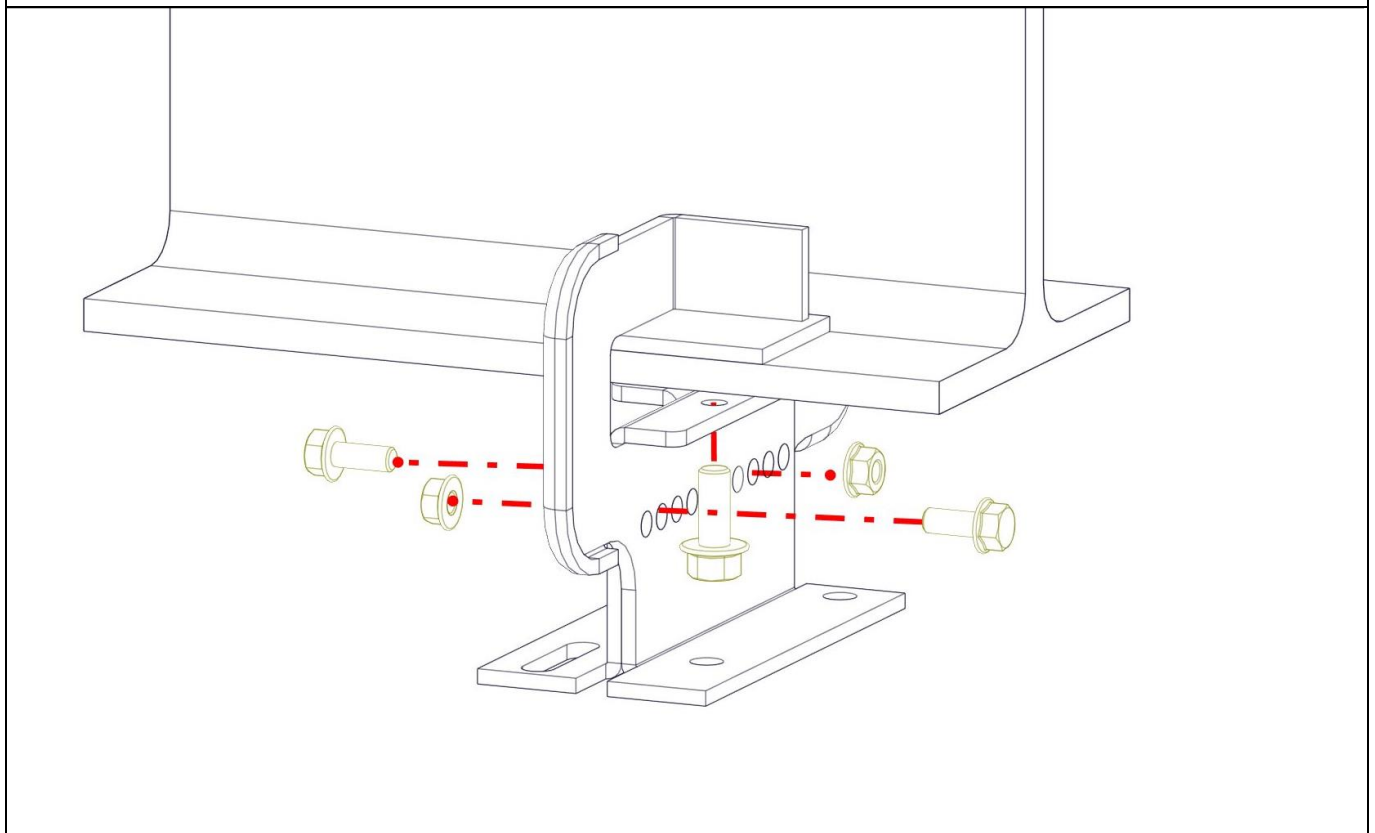
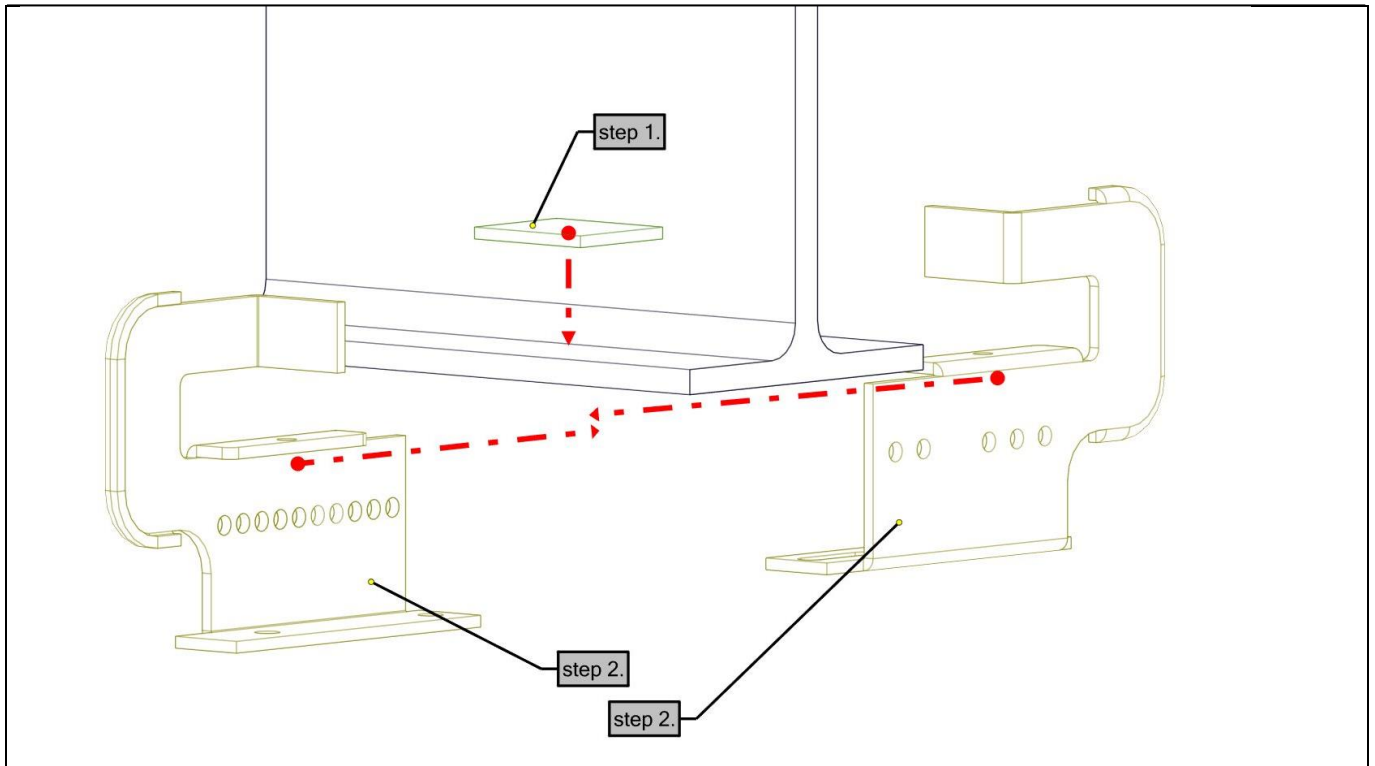
1. FBS provides a solution for conditions when connection to the building structure with welding and screwing are not allowed.
2. FBS System provides saving at material cost up to %35.
3. FBS System provides saving at workmanship cost up to %35.



4. FBS System provides saving at load per sqm up to %45 comparing to convention box-profile methods.
5. FBS System provides time saving on installation due to bolt and nut connection.
6. There is no welding, anti-rust and touch-up related cost.

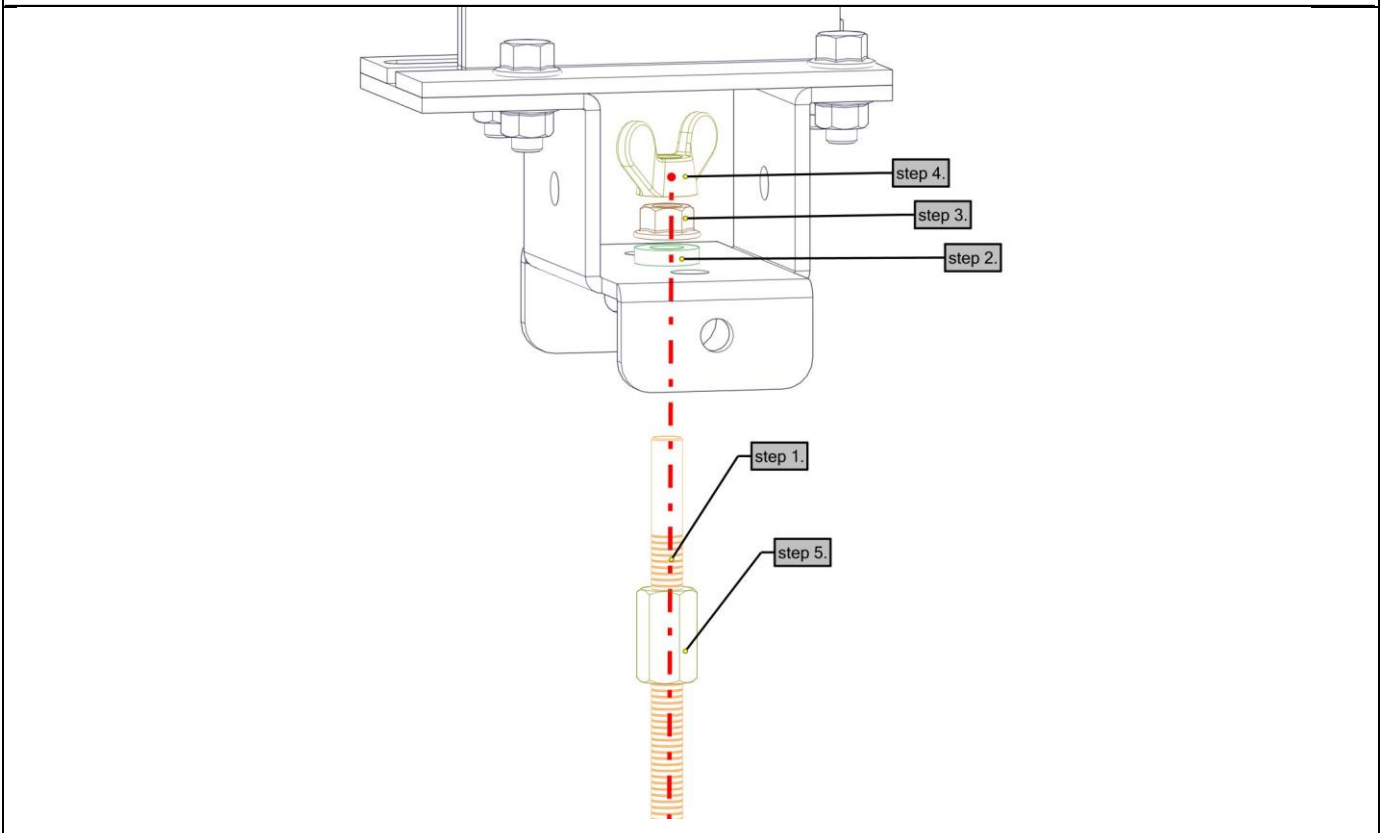
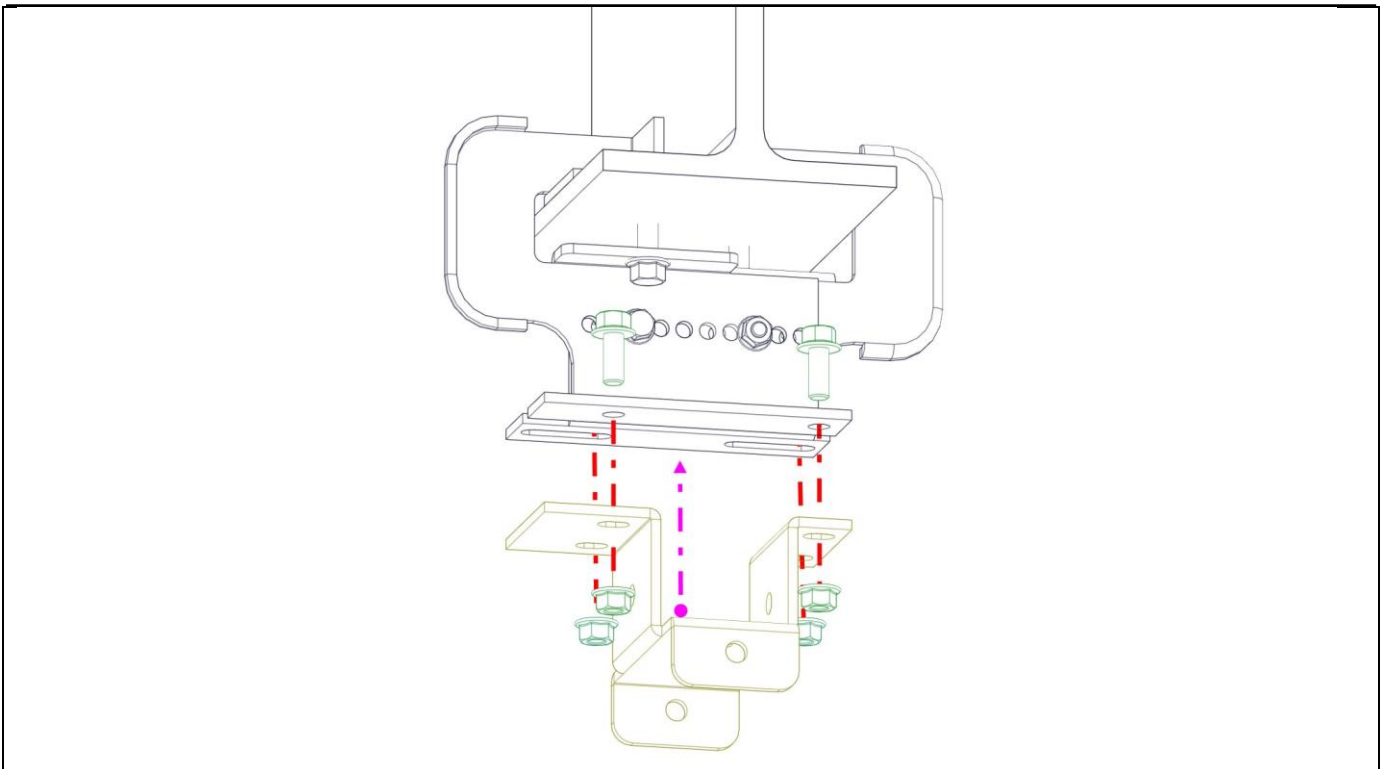
ASSEMBLY TECHNIQUE

STEP 1.



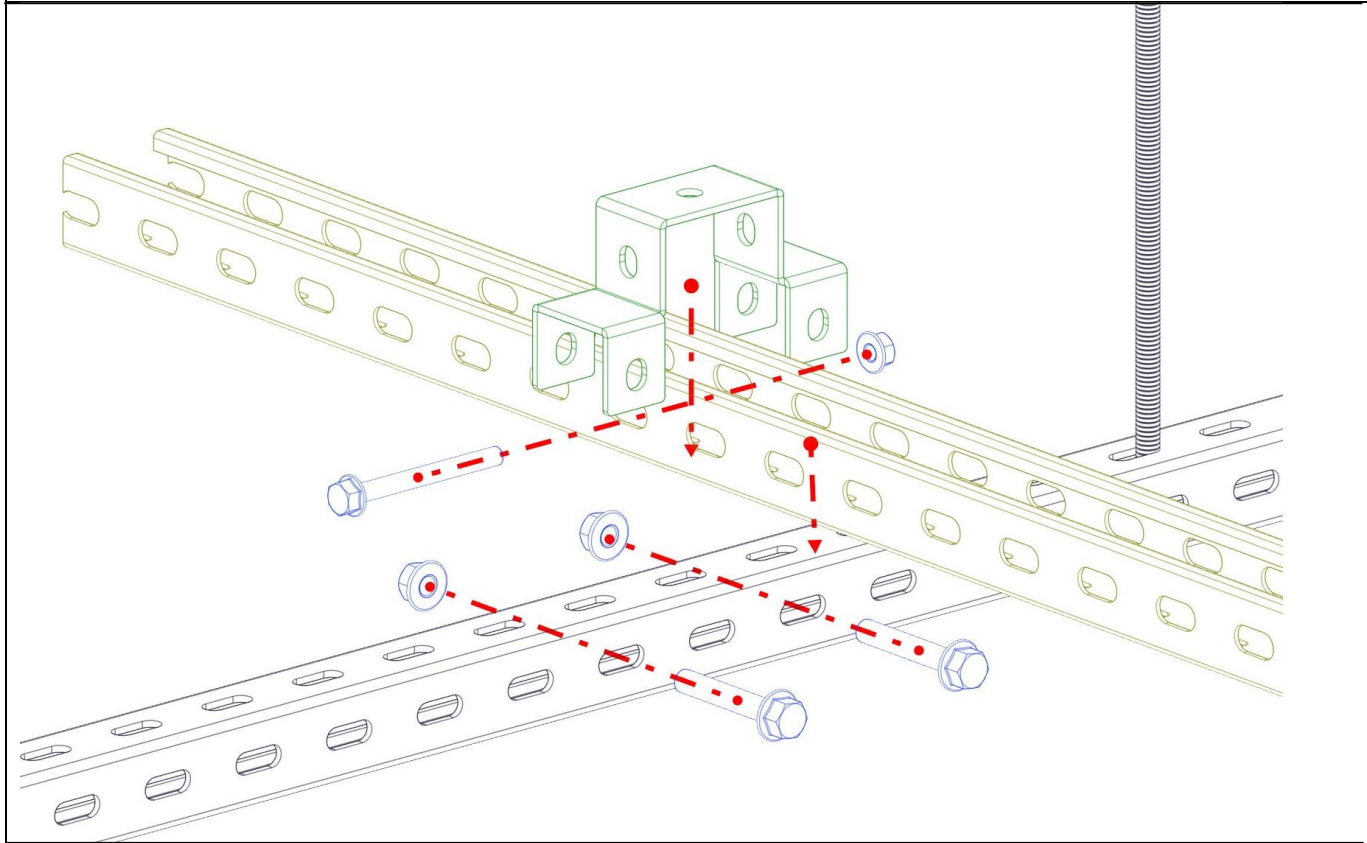
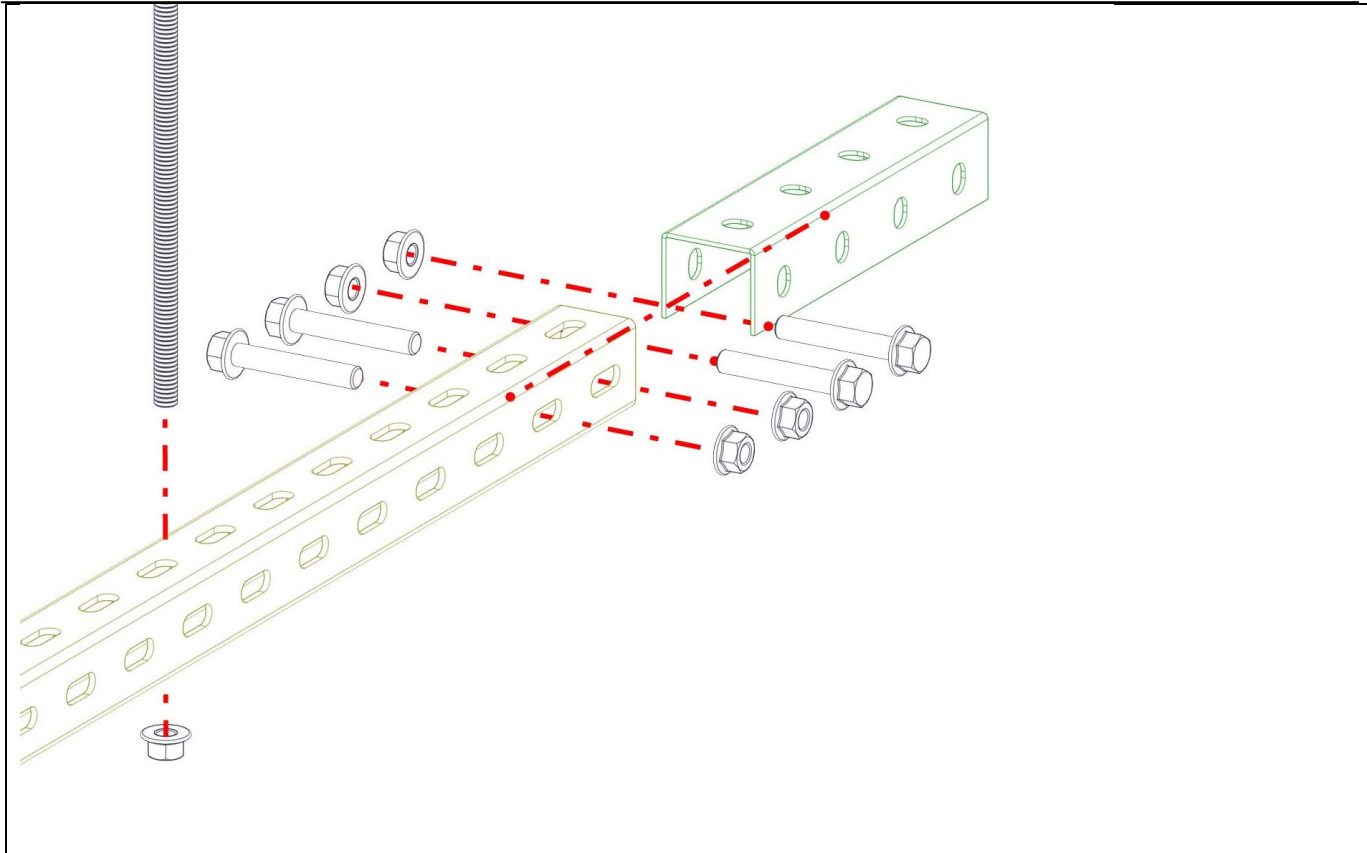
STEP 2.

STEP 3.



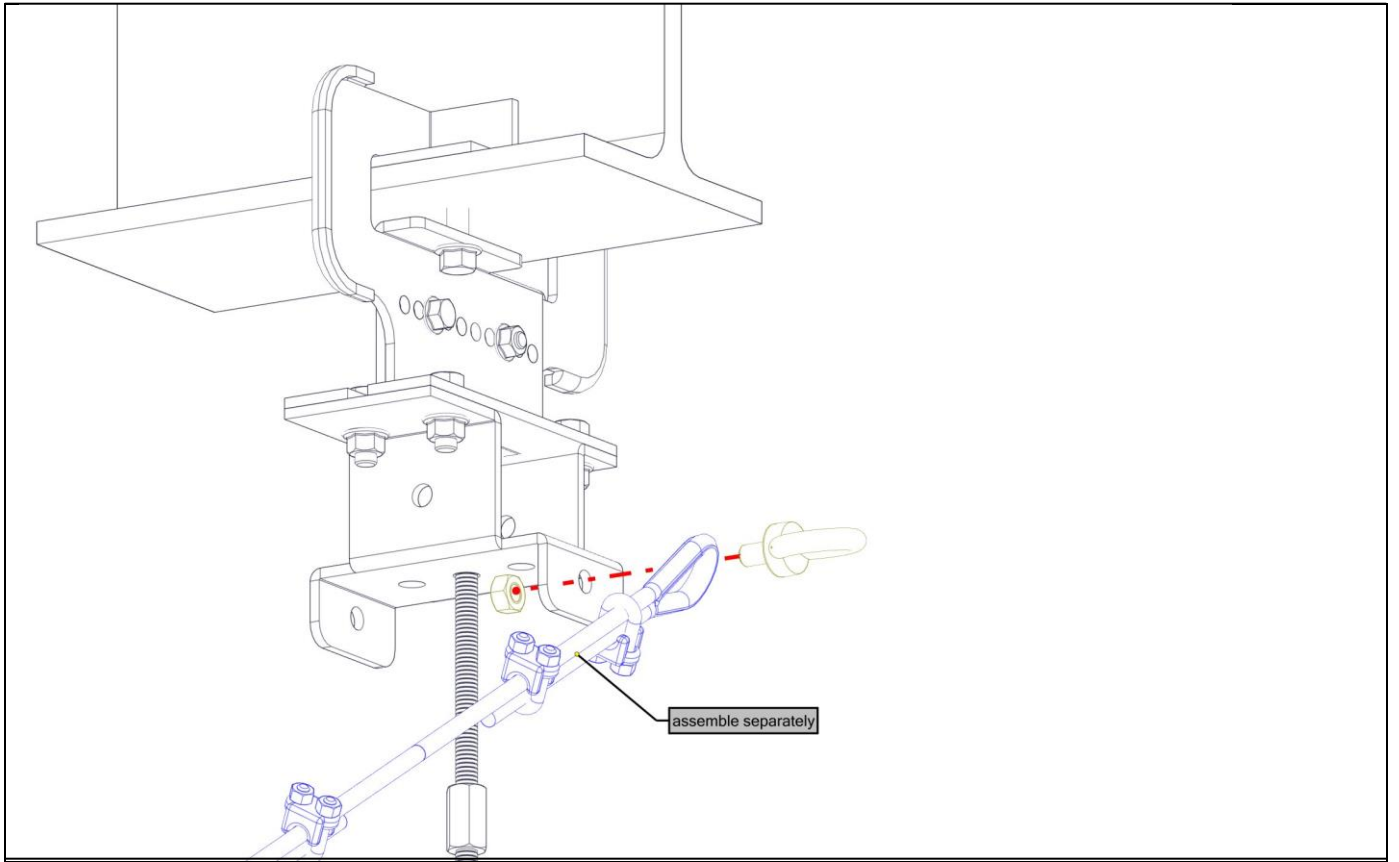
STEP 4

STEP 5.



STEP 6.

STEP 7.



Declaration of Performance

No:A-INT.PD20171001-01



1. Unique identification code of the product-type:	"BUTEM" Metal Ceiling Systems
2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11 (4):	Product Type, Order/Batch Nr.
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:	Internally, to produce an installed suspended ceiling
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11 (5):	BÜTEM METAL FORM SANAYİ TİCARET A.Ş. Osman Gazi Mahallesi Ziya Gökalp Caddesi No:10 Esenyurt Istanbul Turkey T:+90 (212)886 33 00 F:+90 (212) 886 33 10 www.butemmetal.com.tr
5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12 (2):	Not Applicable
6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:	Systems 3
7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:	(a) The manufacturer carrying out factory production control; (b) Turkish Standards Institution (TSE) /Notified Body No:1783 issued the Reaction to Fire classification report (Report No:TSE-19.01.2017-170050) according to TS EN 13501-1+A1:2013-04 as the notified testing laboratory (based on sampling carried out by the manufacturer).
8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:	Not Applicable

Declaration of Performance

No:A-INT.PD20171001-01



9.Declared Performance

- (a) Column 1 shall contain the list of essential characteristics as determined in the harmonized technical specifications for the intended use or uses indicated in point 3 above.
- (b) For each essential characteristic listed in column 1 and in compliance with the requirements of Article 6, Column 2 shall contain the declared performance, expressed by level or class, or in a description, related to the corresponding essential characteristics. The letters 'NPD' (No Performance Determined) shall be indicated where no performance is declared.
- (c) For each essential characteristic listed in column 1, column 3 shall contain:
- I-Dated reference of the corresponding harmonized standard and, where relevant, the reference number of the Specific or Appropriate Technical Documentation used; or
 - II-Dated reference of the corresponding European Assessment Document where available and reference number of the European Technical Assessment used.

Essential Characteristics	Performance	Harmonized Technical Specification
Reaction To fire	A2-s1, d0	TS EN 13964:2014-04 + TS EN13501-1+A1:2010
Release of Dangerous Substances	No Content	TS EN 13964:2014-04 + TS EN13501-1+A1:2010
Flexural Tensile Strength	NPD	TS EN 13964:2014-04 + TS EN13501-1+A1:2010
Thermal Conductivity	NPD	TS EN 13964:2014-04 + TS EN13501-1+A1:2010
Durability	Corrosion Class B	TS EN 13964:2014-04 + TS EN13501-1+A1:2010
Sound Absorption Single Value a_w	See Table Below	TS EN 13964:2014-04 + TS EN13501-1+A1:2010

Sound Absorption Single Value a_w	Perforation Types		
	Ø1,5 mm	Ø1,8 mm	Ø2,5 mm
JM 60	-	0,35	0,35
Royalin R6/60	0,60		
JM 60 Double	0,45		
JM60 with 25 mm 50 kg/m ³ rockwool	1,00		

10.The performance of the product identified in point 1 and 2 is in conformity with he declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.