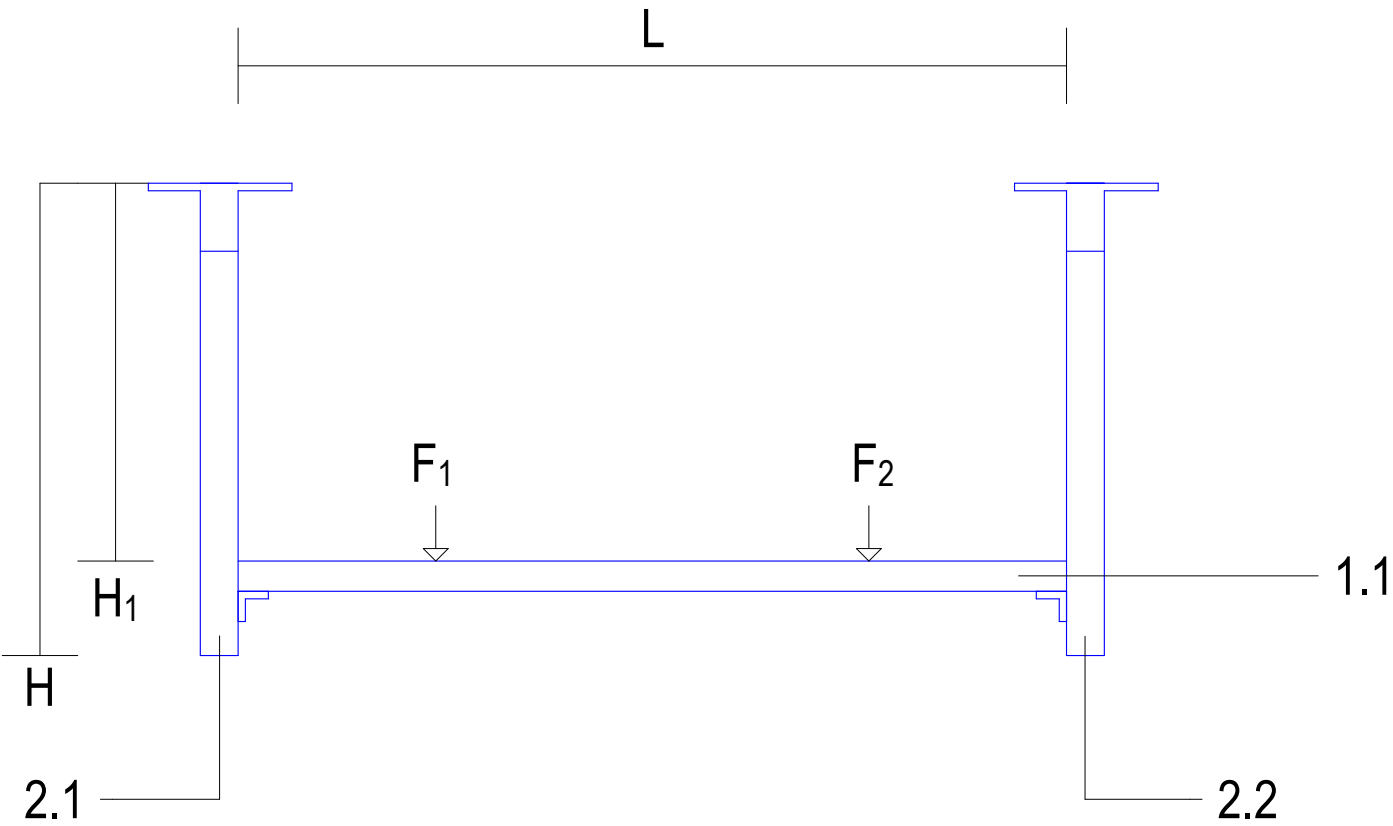

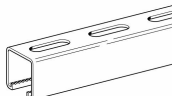
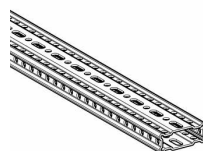
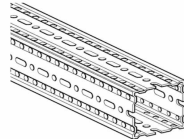
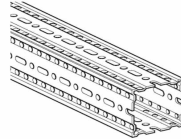

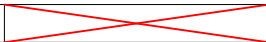
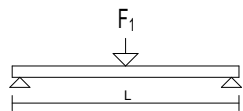
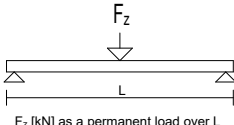
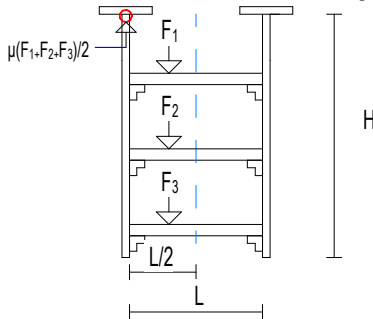
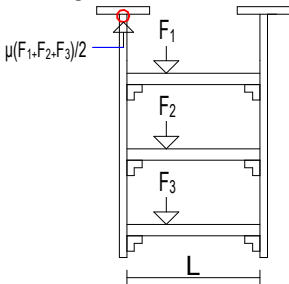
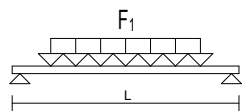
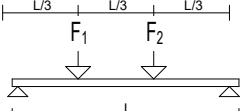
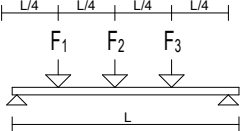


FORM 1A

DATA INPUT FORM

DATA INPUT - SIZING				DATA INPUT - LOADS					
Item	Un	Value	Validated	Item	Un	Value	Max Span (m)	Value (kN)	Validated
H <sub>1</sub>	mm	1372		F <sub>1</sub>	kN/m	2.2000	1.6	3.5200	
H	mm	1544		F <sub>2</sub>	kN/m	2.2000	1.6	3.5200	
L	mm	1487							



		Type:	Rod	Pressix CC 41	siFramo 80/30	siFramo 80	siFramo 100
							
Horizontal Profiles	L <sub>max</sub> (mm)	Cut Lenght (mm)	Max. Loads (kN)				
	750	742		4.67	30.20	53.30	161.15
	1000	990		2.62	16.99	29.98	90.64
	1200	1189		1.82	11.80	20.82	62.95
	1500	1487		1.17	7.55	13.33	40.29
	2000	1983		0.66	4.25	7.50	22.66
	Profile ID	Formula	Profile Selection				
1.1	F <sub>1</sub> +F <sub>2</sub>						
Vertical Profiles	H <sub>max</sub> (mm)			Max. Loads (kN)			
	All Sizes						
	Profile ID	Formula	Profile Selection				
	2.1	F <sub>1</sub> +F <sub>2</sub>					
	2.2						
Horizontal Loads Calculation Method				Vertical Loads Calculation Method			
<b>Point Load</b>		<b>Example:</b>		<b>Load Distribution Assumption</b>		<b>Example:</b>	
		<p>For a horizontal beam with a Lenght of 1000mm, the Maximum Loads supported for the different configuration of Loads are the following:</p> <ul style="list-style-type: none"><li>- Single Point Load - 12.06 kN</li><li>- Distributed Load - 24.13 kN/m</li><li>- 2 Point Load - 18.10 kN</li><li>- 3 Point Load - 18.09 kN</li></ul> <p>Based on these values, for the purpose of this Catalogue, we will consider that the Load will always be a Point Load in the center of the beam, which is the worst case scenario.</p> 					
<b>Distributed Load</b>							
							
<b>2 Point Loads</b>		<p>Notes:</p> <ol style="list-style-type: none"><li>Maximum working forces to be calculated as Pointed Load</li><li>The worst scenario should consider that the forces are off-center of the horizontal profiles and that will cause a bigger effort in the critical point of the vertical profile</li><li><math>\mu(F_1+F_2+F_3)/2 \leq F_{max}</math> <math>\mu</math> is the coefficient that assumes that the forces are not centered, concentrating more efforts on one side of the structure</li></ol>		<p>1. Initial Assumptions:</p> <ul style="list-style-type: none"><li>- 3 levels;</li><li>- Loads Not Centered;</li><li>- Coefficient <math>\mu = 1,2</math>;</li><li>- Maximum axial resistance of the vertical profile: 20kN</li></ul> <p>2. For this case:</p> <ul style="list-style-type: none"><li>- <math>\mu(F_1+F_2+F_3)/2 \leq F_{max}</math></li><li>- <math>F_1+F_2+F_3 \leq (20 \cdot 2)/1,2</math></li><li>- <math>F_1+F_2+F_3 \leq (20 \cdot 2)/1,2</math></li><li>- <math>F_1+F_2+F_3 \leq 33,33kN</math></li></ul> <p>3. The user only needs to compare the sum of the Fn Load values with the supported values in the table and select the appropriate beam type.</p>			
							
<b>3 Point Loads</b>							
							

**NOTE:**  
**FORM2A Production:**  
Defines primary and secondary support component sizes, types and part numbers.

**Scope Exclusion:**  
Frame interface with the building structure is not included in this document.

For comprehensive guidelines and additional information, contact the project management team.

Support ID	DC.FWA.LDB.1.1.3
Order Amount	7

OVERVIEW

MC Prefab is a collaborative joint venture between CTS, MECWIDE, and BIMMS. The primary objective of this partnership is to streamline the production of Mechanical, Electrical, and Plumbing (MEP) support structures. To achieve standardization and optimization in support production, installation, and to minimize material waste, a comprehensive catalog of solutions has been developed. This catalog defines all support solutions along with their respective variables.

Process Stages:

The overall process of MEP support structure production and installation is divided into three distinct stages:

1-Preparation

2-Production

3-Installation

Each stage requires specific documentation, outlined as follows:

**Form1A:** Base Specification for Support Solution Definition

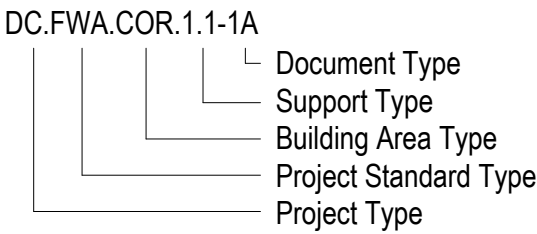
**Form2A:** Fabrication Drawing

**Form3A:** Installation Drawing

These documents ensure the standardization and efficiency of the entire process, from initial preparation through to final installation.

For any further details or clarifications, please refer to the MC Prefab documentation guidelines or contact the project management team.

Naming Convention



P02	03/12/2024	Issued For Information	GJ	JT	
P01	08/11/2024	Issued For Information	GJ	JT	
Rev.	Date	Description	Sign.	Veri.	

JOINT VENTURE:



DESIGN & BUILD PARTNERS:



DRAWING NAME:

DC.FWA.LDB.1.1.3-1A

DRAWING STATUS: Issued For Information		SCALE:	STATUS: S2
DATE CREATED: 08/11/2024	LAST REV. DATE: 03/12/2024	SIGNED: GJ	CONTROL: JT
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