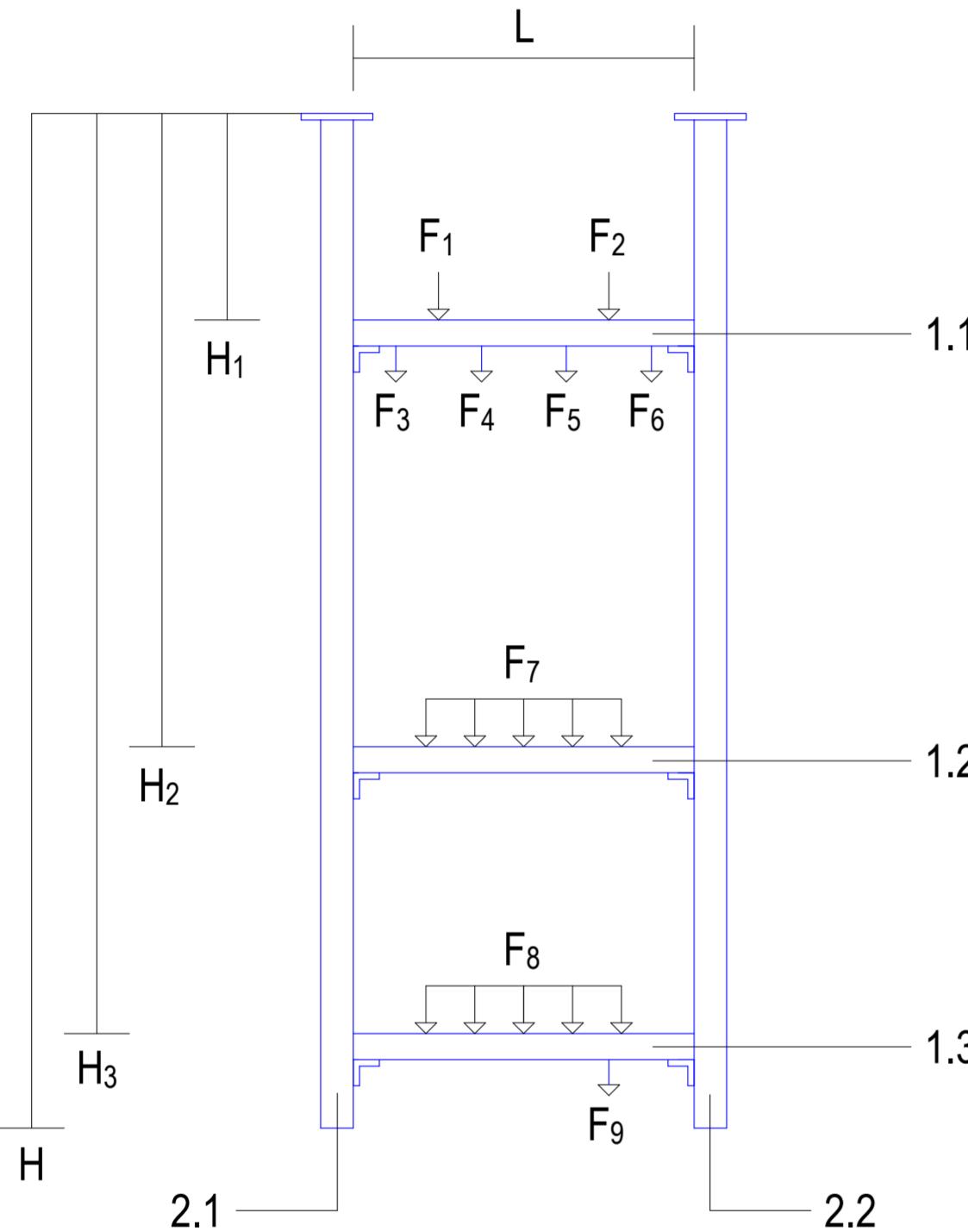


FORM 1A



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.

DATA INPUT FORM

DATA INPUT - SIZING				DATA INPUT - LOADS					
Item	Un	Value	Validated	Item	Un	Value	Max Span (m)	Value (kN)	Validated
H ₁	mm	712		F ₁	kN/m	0.8000	1.07	0.85600	
H ₂	mm	1319		F ₂	kN/m	0.8000	1.07	0.85600	
H ₃	mm	1719		F ₃	kN/m	0.0700	1.07	0.07490	
H	mm	1919		F ₄	kN/m	0.0700	1.07	0.07490	
L	mm	742		F ₅	kN/m	0.0700	1.07	0.07490	
				F ₆	kN/m	0.0700	1.07	0.07490	
				F ₇	kN/m	0.4413	1.07	0.47219	
				F ₈	kN/m	0.4413	1.07	0.47219	
				F ₉	kN/m	0.1961	1.07	0.20983	

		Type:	Rod	Pressix CC 41	siFramo 80/30	siFramo 80	siFramo 100				
Horizontal Profiles	L _{max} (mm)	Cut Length (mm)	Max. Loads (kN)								
	500	493	10.50								
	600	593	7.29								
	750	742	4.67								
	1000	990	2.62								
	1200	1189	1.82								
Vertical Profiles	Profile ID	Formula	Profile Selection								
	1.1	F ₁ +F ₂ +...F ₆									
	1.2	F ₇									
	1.3	F ₈ +F ₉									
	H _{max} (mm)		Max. Loads (kN)								
	All Sizes										
Horizontal Loads Calculation Method	Profile ID	Formula	Profile Selection								
	2.1	F ₁ +F ₂ +...F ₉									
	2.2										
	Point Load			Vertical Loads Calculation Method							
Vertical Loads Calculation Method											
Example: For a horizontal beam with a Length of 1000mm, the Maximum Loads supported for the different configuration of Loads are the following: - Single Point Load - 12.06 kN - Distributed Load - 24.13 kN/m - 2 Point Load - 18.10 kN - 3 Point Load - 18.09 kN			Load Distribution Assumption 								
Notes: 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.			Example: 								
1. Maximum working forces to be calculated as Pointed Load 2. 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 3. $\mu(F_1+F_2+F_3)/2 \leq F_{max}$ μ is the coefficient that assumes that the forces are not centered, concentrating more efforts on one side of the structure			Notes: 1. Initial Assumptions: - 3 levels; - Loads Not Centered; - Coefficient $\mu = 1.2$; - Maximum axial resistance of the vertical profile: 20kN 2. For this case: $\mu(F_1+F_2+F_3)/2 \leq F_{max}$ $F_1+F_2+F_3 \leq (20*2)/1.2$ $F_1+F_2+F_3 \leq 33.33kN$ 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.								

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

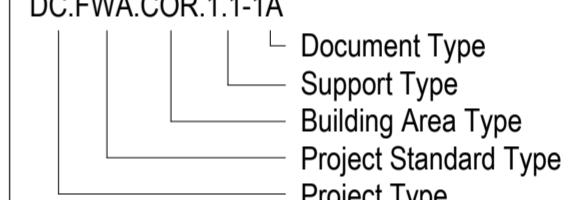
Form3A: Installation Drawing

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

DC.FWA.COR.1.1-1A



JOINT VENTURE:

MC Prefab
Nordics

DESIGN & BUILD PARTNERS:

CTS Nordics

BIMMS
integrated engineering

MECWIDE
ENGINEERING CHALLENGES

DRAWING NAME:

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