

# F31



## COSMIC TRUSS F31 TRUSS SYSTEM

The versatile and expandable F31 truss comes in a wide range of sizes, and can be used to make square or rectangular frames of any length or diameter. The F31 truss can even be used for freestanding signs when anchored with a sturdy Tube Base Plate. The F31 is also available in a premium format which has a higher load rating.

Connecting F31 segments together to form the desired size and shape is easy. Each piece of Single Tube Truss comes with attached conical connectors, which incorporate the Cosmic Truss famous conical coupling system. This unique connector, developed from "mouse-key" technology used in oil rig structures, helps to maintain overall rigidity. Particularly at key stress points. Conical coupling is also quick and easy to assemble, and because it is genderless, each piece has even greater versatility, offering more rigging options.

Although extremely lightweight, F31 truss is also very rugged and durable. That's because it's made of the same high-strength 6082-T6 extruded aluminum alloy as our other trussing products, a material so strong, rigid and corrosion-resistant that it is used by the aviation industry for aircraft construction.

### TECHNICAL DATA

Pipe diameter main pipe:	50mm
Wall thickness:	2mm
Material:	AlMgSi F31 / T6082
Pipe diameter brace:	20mm x 2mm
Conical connectors included in scope of delivery	

### PRODUCED ACCORDING TO

EN 1090-1:2009 + A1:2011

EN 1090-3

### INCLUSIVE

1 X



2 X



### LOAD TABLE

#### Load for any point of the coupling



Span	Uniform distribution load		Center point load	
	kg / m	Deflection (cm)	kg	Deflection (cm)
0,50	912	0,1	228	0,1
1,00	227	0,5	113	0,4
1,50	100	1,1	75	0,9
2,00	55	1,9	55	1,6
2,50	28	2,5	44	2,5
3,00	15	3,0	29	3,0
3,50	9	3,5	20	3,5
4,00	5	4,0	14	4,0
4,50	3	4,5	10	4,5
5,00	2	5,0	7	5,0

#### Load without coupling



Span	Uniform distribution load		Center point load	
	kg / m	Deflection (cm)	kg	Deflection (cm)
0,50	2014	0,3	503	0,2
1,00	466	1,0	251	0,9
1,50	137	1,3	128	1,3
2,00	56	2,0	71	2,0
2,50	28	2,5	44	2,3
3,00	15	3,0	29	3,0

The weight of the truss is considered in the load table.

Technical changes and errors reserved