

Tube Frame — model summary

WHAT THE MODEL NEEDS

PARTS		MATERIAL TO BUY	
151 pieces		5 sheets · 6 tube bars	
Sheets	71 pcs · 4 distinct	Steel 18ga	1 sheet · 23% yield
Tubes	80 pcs · 9 distinct	Steel Galvanized · anti-slip 14ga	4 sheets · 67% yield
Rivet nuts	192	Tube 3x2 14ga	6 tube bars · 89% yield

SHEET LASER CUTTING	
78.7 m of cut	
Steel Galvanized 14ga	50.4 m · 204 pierces · 14 min
↳ feed	4,250 mm/min (167 in/min) · 3 kW O2
Steel 18ga	28.3 m · 59 pierces · 4.6 min
↳ feed	7,000 mm/min (276 in/min) · 3 kW O2
Total	263 pierces · 18 min

TUBE LASER CUTTING	
50.4 m of laser cut (ends + holes)	
Tube length (all pieces)	32.1 m
Pieces	80
End cuts	160
Holes	192
Tube 3x2 14ga	50.4 m of cut · 32.1 m of tube · 352 pierces · 15 min
↳ feed at the wall	4,250 mm/min (167 in/min) · 3 kW O2

WELDING		FINISHING		NO FINISHING NEEDED	
1,338.0" of weld		9.53 m² to finish		12 pieces bought finished (galvanized)	
Weldments	3 (13 built)	Powder Coat - Rough (Dark Grey)	9.53 m²	Flooring Plate A	4 pcs
Joints	13			Flooring Plate B	4 pcs
				Flooring Plate C	4 pcs

QUANTITIES FOR QUOTING, BY PROCESS

OPERATION	QUANTITY	ALSO MEASURED AS	PROPOSED FEED	BASIS
Raw material				
Steel 18ga · 1 sheet 3,048 x 1,219 mm	35.4 kg	1 pcs		nest: sheets x size x thickness x density
Steel Galvanized · anti-slip 14ga · 4 sheets 3,048 x 1,219 mm	222.3 kg	4 pcs		nest: sheets x size x thickness x density
Tube 3x2 14ga · 6 bars of 6.0 m	136.7 kg	6 pcs		nest: bars x perimeter x wall x length x density