

PARTITION METAL FRAME SYSTEM

STURFRAME

INTRODUCTION

STURFRAME Partition Metal Frame System is used for indoor non-loadbearing drywall constructions. The system includes C-shaped studs and runners which are manufactured from lightweight roll-formed corrosion resistant and galvanized steel, providing cost-effective, multi-purpose solutions suitable for all types of buildings.

The system complies with ASTM C645 & C955 and are manufactured by accredited ISO 9001 factory.

Metal Framing Members

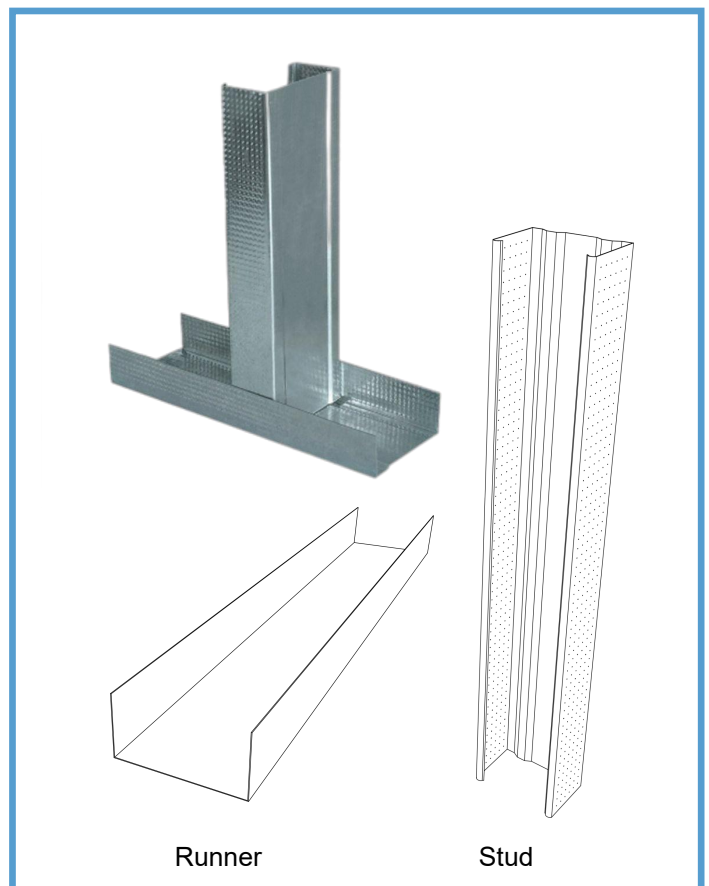
STURFRAME Metal Stud is available in 35,45,50,64,76,92,96,102,127,152 and 200mm standard widths and 32, 45, 50 and 76mm height of flanges to accommodate a wide range of applications (see table 1). All studs have flanges with that are knurled for quick screw attachment of boards.

Studs spacing to be based on wall height, stud's size and thickness, framing condition, deflection limitations and design load level. Correct size and thickness of the applicable product please refer to data reference table.

STURFRAME Steel Runner is used to align and fix studs to ceiling and floor which is available corresponding to studs in 35, 45,50,64,76,92, 96,102,127 152 and 200mm standard widths and 25, 32, 45 and 50mm height of flanges to suit a wide variety of applications (see table 2).

CHARACTERISTIC

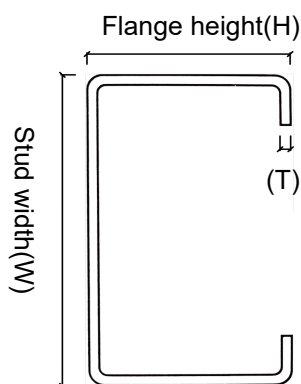
- Simple and easy fixing
- Wide range of sizes
- Lightweight and durable
- High tensile strength
- Corrosion resistance



Star Beat Building Materials Limited

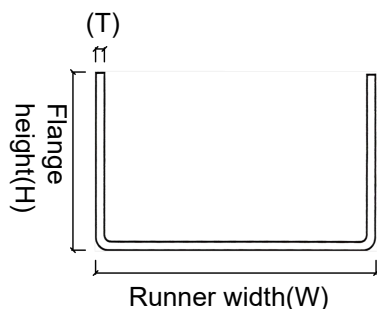
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Table 1 : Stud dimensions and thicknesses



Product Code	Stud (W)	Flange Height (H)				Uncoated Steel Thickness (T)							
	mm	mm				mm							
		32	45	50	76	0.5	0.6	0.8	1.0	1.2	1.5	2.0	2.5
PS-35	35	•				•							
PS-45	45	•				•							
PS-50	50	•	•			•	•	•	•	•	•	•	•
PS-64	64	•	•	•		•	•	•	•	•	•	•	•
PS-76	76	•	•	•		•	•	•	•	•	•	•	•
PS-92	92	•	•	•		•	•	•	•	•	•	•	•
PS-96	96	•	•	•		•	•	•	•	•	•	•	•
PS-102	102	•	•	•		•	•	•	•	•	•	•	•
PS-127	127		•	•				•	•	•	•	•	•
PS-152	152		•	•				•	•	•	•	•	•
PS-200	200			•	•						•	•	•

Table 2 : Runner dimensions and thicknesses



Product Code	Runner(W)	Flange Height(H)				Uncoated Steel Thickness(T)							
	mm	mm				mm							
		25	32	45	50	0.5	0.6	0.8	1.0	1.2	1.5	2.0	2.5
PR-35	35	•	•			•							
PR-45	45	•	•			•							
PR-50	50	•	•	•	•	•	•	•	•	•	•	•	•
PR-64	64	•	•	•	•	•	•	•	•	•	•	•	•
PR-76	76	•	•	•	•	•	•	•	•	•	•	•	•
PR-92	92	•	•	•	•	•	•	•	•	•	•	•	•
PR-96	96	•	•	•	•	•	•	•	•	•	•	•	•
PR-102	102	•	•	•	•	•	•	•	•	•	•	•	•
PR-127	127		•	•	•			•	•	•	•	•	•
PR-152	152		•	•	•			•	•	•	•	•	•
PR-200	200				•						•	•	•

*Other size of stud and runner can be customized to match individual design and application.

Simulation of the Metal Stud Limiting Heights:

1. Limiting heights calculated are based on the mechanical performance of metal stud and deflection limits of L/120; L/240; and L/360 per the test standard of ASTM C645 and ASTM C754.
2. The data generated are based on the strength and deflection calculation of the stud which is being simply supported by a designed span of 305, 407 and 610mm and with designed flange height of 35, 45 and 50mm and fixed edge depth of 5mm.

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0.5mm Member				Limiting Heights (mm)		
Stud Width	Flange Height	Uncoated Steel Thickness	Stud Spacing	240Pa Uniform Load Deflection Limit		
		mm		L/120	L/240	L/360
50	32	0.50	305	3,730	2,984	2,566
50	32	0.50	407	3,282	2,692	2,315
50	32	0.50	610	2,790	2,372	2,040
64	32	0.50	305	4,290	3,432	2,951
64	32	0.50	407	3,775	3,095	2,662
64	32	0.50	610	3,209	2,727	2,345
76	32	0.50	305	4,933	3,946	3,394
76	32	0.50	407	4,341	3,560	3,061
76	32	0.50	610	3,690	3,136	2,697
92	32	0.50	305	5,673	4,538	3,903
92	32	0.50	407	4,992	4,094	3,520
92	32	0.50	610	4,243	3,607	3,102
102	32	0.50	305	6,013	4,811	4,137
102	32	0.50	407	5,292	4,339	3,732
102	32	0.50	610	4,498	3,823	3,288

0.6mm Member				Limiting Heights (mm)		
Stud Width	Flange Height	Uncoated Steel Thickness	Stud Spacing	240Pa Uniform Load Deflection Limit		
		mm		L/120	L/240	L/360
50	32	0.60	305	4,010	3,208	2,759
50	32	0.60	407	3,529	2,894	2,489
50	32	0.60	610	2,999	2,550	2,193
64	32	0.60	305	4,612	3,689	3,173
64	32	0.60	407	4,058	3,328	2,862
64	32	0.60	610	3,449	2,932	2,522
76	32	0.60	305	5,303	4,243	3,649
76	32	0.60	407	4,667	3,827	3,291
76	32	0.60	610	3,967	3,372	2,900
92	32	0.60	305	6,099	4,879	4,196
92	32	0.60	407	5,367	4,401	3,785
92	32	0.60	610	4,562	3,878	3,335
102	32	0.60	305	6,465	5,172	4,448
102	32	0.60	407	5,689	4,665	4,012
102	32	0.60	610	4,836	4,110	3,535

0.6mm Member				Limiting Heights (mm)		
Stud Width	Flange Height	Uncoated Steel Thickness	Stud Spacing	240Pa Uniform Load Deflection Limit		
		mm		L/120	L/240	L/360
50	45	0.60	305	4,180	3,344	2,876
50	45	0.60	407	3,678	3,016	2,594
50	45	0.60	610	3,127	2,658	2,286
64	45	0.60	305	5,100	4,080	3,509
64	45	0.60	407	4,080	3,346	2,877
64	45	0.60	610	3,468	2,948	2,535
76	45	0.60	305	5,810	4,648	3,997
76	45	0.60	407	5,113	4,192	3,606
76	45	0.60	610	4,346	3,694	3,177
92	45	0.60	305	6,710	5,368	4,616
92	45	0.60	407	5,905	4,842	4,164
92	45	0.60	610	5,019	4,266	3,669
102	45	0.60	305	7,050	5,640	4,850
102	45	0.60	407	6,204	5,087	4,375
102	45	0.60	610	5,273	4,482	3,855

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0.8mm Member				Limiting Heights (mm)		
Stud Width	Flange Height	Uncoated Steel Thickness	Stud Spacing	240Pa Uniform Load Deflection Limit		
		mm		L/120	L/240	L/360
50	32	0.80	305	4,350	3,480	2,993
50	32	0.80	407	3,828	3,139	2,700
50	32	0.80	610	3,254	2,766	2,379
64	32	0.80	305	5,003	4,002	3,442
64	32	0.80	407	4,402	3,610	3,104
64	32	0.80	610	3,742	3,181	2,735
76	32	0.80	305	5,753	4,602	3,958
76	32	0.80	407	5,063	4,151	3,570
76	32	0.80	610	4,303	3,658	3,146
92	32	0.80	305	6,616	5,293	4,552
92	32	0.80	407	5,822	4,774	4,106
92	32	0.80	610	4,949	4,206	3,617
102	32	0.80	305	7,013	5,610	4,825
102	32	0.80	407	6,171	5,060	4,352
102	32	0.80	610	5,246	4,459	3,834

0.8mm Member				Limiting Heights (mm)		
Stud Width	Flange Height	Uncoated Steel Thickness	Stud Spacing	240Pa Uniform Load Deflection Limit		
		mm		L/120	L/240	L/360
50	45	0.80	305	4,590	3,672	3,158
50	45	0.80	407	4,131	3,387	2,913
50	45	0.80	610	3,718	3,160	2,718
64	45	0.80	305	5,508	4,406	3,790
64	45	0.80	407	4,957	4,065	3,496
64	45	0.80	610	4,461	3,792	3,261
76	45	0.80	305	6,334	5,067	4,358
76	45	0.80	407	5,701	4,675	4,020
76	45	0.80	610	5,131	4,361	3,751
92	45	0.80	305	7,284	5,827	5,012
92	45	0.80	407	6,556	5,376	4,623
92	45	0.80	610	5,900	5,015	4,313
102	45	0.80	305	8,013	6,410	5,513
102	45	0.80	407	7,211	5,913	5,086
102	45	0.80	610	6,490	5,517	4,744
127	45	0.80	305	8,814	7,051	6,064
127	45	0.80	407	7,933	6,505	5,594
127	45	0.80	610	7,139	6,068	5,219
152	45	0.80	305	10,577	8,461	7,277
152	45	0.80	407	9,519	7,806	6,713
152	45	0.80	610	8,091	6,635	5,706

0.8mm Member				Limiting Heights (mm)		
Stud Width	Flange Height	Uncoated Steel Thickness	Stud Spacing	240Pa Uniform Load Deflection Limit		
		mm		L/120	L/240	L/360
92	50	0.80	305	7,630	6,104	5,249
92	50	0.80	407	6,714	5,506	4,735
92	50	0.80	610	5,707	4,851	4,172
102	50	0.80	305	8,088	6,470	5,564
102	50	0.80	407	7,117	5,836	5,019
102	50	0.80	610	6,050	5,142	4,422
127	50	0.80	305	9,301	7,441	6,399
127	50	0.80	407	8,185	6,712	5,772
127	50	0.80	610	6,957	5,914	5,086
152	50	0.80	305	10,696	8,557	7,359
152	50	0.80	407	9,413	7,718	6,638
152	50	0.80	610	8,001	6,801	5,849