

Grand Sapphire PEB - Master Bill of Quantities

Grand Sapphire (Grandspire) Event Complex, Qadirabad, Mandi Bahauddin, Punjab, Pakistan | Client: Grand Sapphire Events (Pvt) Ltd | Date: 2026-08-03 | Currency: PKR

Scope: PEB / structural steel for 3 identical event halls (83 ft x 125 ft each). RCC (restaurant/kitchen/admin/bridal) excluded.

Structural Steel (frame) - Rs.240/kg

Item / Description	Section/Size	Qty	Unit	Rate	Amount (PKR)
Columns (built-up I, web4/fl 6mm)	I-sec 350x250	13,265.0	kg	240	3,183,600
Rafter 1 - eave haunch	I-sec 350x250	6,180.2	kg	240	1,483,248
Rafter 2 - mid-span	I-sec 350x250	6,180.2	kg	240	1,483,248
Rafter 3 - apex/ridge	I-sec 350x250	6,180.2	kg	240	1,483,248
Base plates 25mm 450x450 A36	450x450x25	1,669.1	kg	240	400,584
J-bolts 4x25mm F1554 Gr105	M25 / 0.9m	582.6	kg	240	139,824
Connection/splice plates 16mm A572	16mm plate	1,272.2	kg	240	305,328
Structural Steel (frame) - Rs.240/kg - Subtotal					8,479,080

Cold-Formed Z Purlins & Girts - Rs.300/kg

Item / Description	Section/Size	Qty	Unit	Rate	Amount (PKR)
Z Purlin 200x75x20 1.6mm G550	Z8" 16ga	10,081.3	kg	300	3,024,390
Z Girt 150x60x20 1.6mm G550	Z6" 16ga	8,901.1	kg	300	2,670,330
Cold-Formed Z Purlins & Girts - Rs.300/kg - Subtotal					5,694,720

Cladding & Insulation

Item / Description	Section/Size	Qty	Unit	Rate	Amount (PKR)
PPGI standing seam 0.5mm AZ150 (roof+walls)	0.5mm PPGI	25,119.8	kg	300	7,535,940
Glass wool 25mm FSK 24kg/m3	25mm FSK	6,400.0	m2	25	160,000
Cladding & Insulation - Subtotal					7,695,940

PEB Erection Labour - Rs.80/sq ft

Item / Description	Section/Size	Qty	Unit	Rate	Amount (PKR)
PEB erection labour	Rs/sqft	31,125.0	sqft	80	2,490,000
PEB Erection Labour - Rs.80/sq ft - Subtotal					2,490,000

Summary

Scope	Amount (PKR)
Structural steel (frame)	8,479,080
Z Purlins & Girts	5,694,720
Cladding & Insulation	7,695,940
Erection Labour	2,490,000
SUBTOTAL	24,359,740
Overhead & Profit (10%)	2,435,974
GRAND TOTAL	26,795,714

Tonnage: Frame steel 35.33 t | Cold-formed 18.98 t | Cladding 25.12 t | Total steel 79.43 t. Insulation 6400 m2. Built-up 31125 sq ft. Codes: ASCE 7-16, AISC 360-16 (LRFD), PBC 2008, Wind 110 mph Exp C, Seismic Zone 2B SDC C.

Key assumptions: 7 frame lines/hall @ 20'-10" (125 ft not divisible by 20 ft); rafters split into 3 equal segments; built-up I-section 350x250 web4/fl6 = 34.54 kg/m; base plate+J-bolts+splice plates in steel kg; connection plates = 4% of frame steel; PPGI & glass wool over full envelope. RCC excluded.