

## BLUESTONE (LAKELAND STONE), KENDAL

**Background :** Supply & installation of a new Mono Pitch style building to Execution class 2 with overhangs, roof & wall cladding, metal deck and precast stairs.

**Specification & Requirements:** Size, 38.15m long in seven 5.45m bays, 21.4m wide (centre to centre of stanchions) and 6.5m high at the low eaves rising to 8.5m high. 5-degree roof pitch. Each end and the front high side have a 2m overhang detail.



The front high side has two 3m wide x 6m high opening and one end has one 3m wide x 6m high opening with PFC door posts. The glazing at one end is formed with PFC posts.

The roof is cladded in Kingspan Goosewing Grey KS1000RW 100mm thick composite sheeting with an LPCB approved "PIR" fire retardant insulated core, complete with two 3m long factory assembled GRP rooflights per bay and barge flashings. The roof cladding system offers a maximum thermal insulation "U" value of 0.21W/m<sup>2</sup>K.

Each side and each end omitting for the openings is cladded to 4m below the low eaves level in 70mm thick KS1000 MR micro-rib, horizontally laid composite sheeting with an LPCB approved "PIR" fire retardant insulated core fixed to pressed steel galvanised "Zed" cladding rails, complete with vertical corner and bottom cill flashings. The vertical cladding system offers a maximum thermal insulation "U" value of 0.27W/m<sup>2</sup>K.

The building is fitted with 4No. insulated fire exit only door(s), each door is galvanised with polyester powder coating over and fitted with a touch bar or panic escape handle to the inside. Also fitted are 1No. 3.6m wide x 4m high and 1No. 3m wide x 6m high electrically operated sectional overhead doors, with thermal insulation (0.59 W/m<sup>2</sup>K), including 3-phase electric operation, plug in and commission to isolator at low level wired up to an industrial 5-pin socket at high level. The external face of the doors has a plastisol finish.

There are 7No. window frames and two large glazed panel sections to one corner. One section has double entrance doors within the panels, all aluminium, complete with sealed Planitherm double glazed units to 1.2 U value.



1<sup>st</sup> Floor - 4 bays only 5KNm<sup>2</sup>, fitted with steel floor decking, Multideck 80-V2 1.2mm gauge 900mm cover. The decking is fixed with ENP2 nails to provide lateral restraint. Floor is formed with a layer of A393 mesh laid on top of the floor decking. 225mm thick floor slab to each floor, with a power float finish.

