Walls clad with acrylic panels and stainless steel mesh

The children's centre has been described as 'a giant metal circus tent' clad with mesh walls that protect play areas, nursery and classrooms. The structure is a standard low-cost exposed galvanised-steel portal frame, large enough for children to play between the water garden, tree house and yurt and, at just over 10m high at the ridge, tall enough to contain the three-storey stack of sea containers that houses offices and classrooms.

Stainless steel mesh was chosen to clad the external walls; this maintains the 'open-air' feeling of the large space while fulfilling the need for relatively high security to protect the children. The lower parts of all four walls are clad with Alpine 24/16/12 chain-link curtain stainless steel security mesh; (the specification indicates the number of coils per foot horizontally and vertically, followed by the gauge). The mesh satisfies BFE Security Rating 2, which is equivalent to Secure by Design requirements.

Each panel of mesh is clamped at the edges to a steel frame and tensioned at top and bottom by means of a steel bar threaded through the links and bolted to the frame with tension bolts.

At upper levels the east and west walls are clad with 128mm-wide panels of Alpine 12/12 mesh tensioned over curved lozenge-shaped steel frames in alternate directions. The resulting lozenge-shaped spaces between alternating panels are filled with 6mm thick full panel acrylic sheets colouring green, orange, pink and black. The sheets are clamped to the frame with stainless steel button-head studs that are used to secure the mesh.

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