TYPICAL GENERAL SPECIFICATION

SUPALINK RANGE MODULAR BAYS

STRUCTURAL DESIGN

The structure is designed and constructed in accordance with the following standards and technical references:-

1. BS5268 Part 2 'Structural Use of Timber'
2. BS449 Part 2 'Structural Use of Steelwork in Buildings'
3. CP3 Chap. V Part 2 'Wind Loads'
4. BS6399 Part 1 'Design Loads for Building'
5. BS648 'Dead Loads'
6. Timber Designers Maual 'Ozelton & Baird'
7. Generally to Current Building Regulations

IMPOSED LOADINGS

Floor - 3.0 kN/m^2
Roof – 0.75 kN/m^2

DESIGN WIND SPEED

46 Mtrs/Sec, in standard construction

FIRE RESISTANCE RATING

External face of walls – Texture finish Class 3 Surface spread of flame.
Plastisol steel finish Class 1 Surface spread of flame.
Internal face of walls and ceilings – Class 0 Surface spread of flame.
Integrity: 30 mins structural stability protection.

FLOOR STRUCTURE – 'U' VALUE = 0.25 w/m2 K

Steel floor frame: 150 x 50 x 4mm C-Section Cold formed Steel Channel perimeter beams with 100 x 50 x 3mm RHS Cold formed floor joists at 406mm centres welded between.

Floor Deck: 18mm V313 Flooring grade moisture resistant T & G Chipboard glued and nailed to timber joist packing battens.

Insulation: Single layer of `Ecobrite' foil insulation membrane laid over steel floor joists with airspace above to underside of Chipboard deck.

Floor Covering: 2.0mm thick 'Marley' pure sheet vinyl with heat welded seams bonded onto chipboard deck.

EXTERNAL WALLS – 'U' VALUE = 0.35w/m2K

Timber Framing: Ex 95 x 35mm top and bottom rails with ex 95 x 35mm vertical studding at 400mm centres, with horizontal cross mid rails.

Cladding: 9mm WBP Exterior grade plywood glued and nailed to studding timber to form a stressed skin construction.

Insulation: 75mm glassfibre min slab insulation quilt fitted in between vertical timber studding.

Vapour Barrier: Single layer of 'Ecobrite' foil insulation membrane is fitted directly onto internal side of walls studs.

Packer battens: 19mm timber packing battens are fitted on top of ecobrite insulation to create air cap behind plasterboard internal lining.

Internal Lining: 12.7mm White 'plaster' vinyl faced plasterboard fixed onto timber packer battens, board joints finished with two part white PVC H-section. All skirting and top cornice are 45 x 9mm UPVC two part clip in type finished in brown for skirtings and white for cornice.

Wall Bay to Bay Joint Cover Strips: Joint concealed by 9mm thick twice rounded MDF strip finished with laminated white vinyl to match wallboards, mounted on timber laths.

ROOF STRUCTURE – (COLD DECK) – 'U' VALUE = 0.25 w/m2 K

Steel Roof Beams and frame: Engineered steel lattice edge beams duo-pitch with steel angle tie bars. Roof beams connect to 100 x 50 x 4mm RHS cold formed full height corner posts, which are connected to the floor perimeter beams at the bottom, creating a rigid steel frame construction. Roof and ceiling are created separately with an air space in between promoting cross ventilation.

Roof Deck and Covering: Single layer rubberised roof blanket is bonded onto 8mm OSB (orientated strand board) which is nailed onto timber roof joists 97 x 38mm @ 400mm ctrs.

Ceiling Joists and Lining: 12.7mm White 'plaster' vinyl faced plasterboard fixed onto timber studding, board joints finished with two part white PVC H-section. Plasterboard is supported off 97 x 38mm timber ceiling joists @ 400mm ctrs.

Insulation: Two layers – 1 layer 80mm & 1 layer 60mm glassfibre insulation quilt is laid in between the ceiling joists directly above the plasterboard.

Roof Ventilation: Achieved above the insulation quilt via continuous strip eaves ventilation at each end of roof, thus preventing the possibility of interstitial roof condensation.

Rainwater Goods: Rainwater is discharged directly from the roof into full length PVC square line gutter along each end of the bays. The gutter discharges via PVC square fall pipes to ground levels.

Ceiling Bay to Bay Joint cover Strip: Joint concealed by 12mm thick twice rounded MDF strip finished with laminated white vinyl to match wallboards, mounted on timber laths.

Fascia detail: Fascia is built onto the ends of the steel columns, and clad with 9mm WBP plywood. The finish is as per the external wall finish.

EXTERNAL DOORS

Door Frames: Joinery grade softwood timber rebated frames with hardwood or duraflex cills (for Disabled access), treated with one coat each oil bound primer, undercoat and gloss.

Doors: Door type and pattern depends upon individual building.

INTERNAL DOORS

Door Frames: Joinery grade softwood timber frames with plant on stop laths (no cill), treated with one coat primer and finish coat to suit requirements.

Doors: Door type and pattern depends upon individual building, but are generally pre-finished 'Blonde-oak' or Landscape 'Sapele' to customers preference

WINDOWS

U value 2.0 w/m2 K

Specification: Double glazed white UPVC framed full opening vent windows size 920W x 1000D glazed in float glass with neoprene glazing gaskets, trickle vents, and opening restrictors. Window linings are white pre-finished plywood with white PVC angle bead surround.

EXTERNAL FITTINGS

Walls: Co-polymer resin re-enforced textured coating or Plastisol sheet steel bonded or pinned to external plywood.

Corner Trims: 9mm WPB plywood corner trims texture coated or Plastisol steel formed corner angle.

Bay Joint Trims: 9mm WPB plywood trims texture coated or Plastisol steel formed bay joint trim.

Plinth Trim: No plinth trim is supplied unless specifically required.

ELECTRICAL INSTALLATION

Distribution Boards: A T P & N distribution board is fitted in one bay of any modular complex to allow one connection to be made to the new building. All other bays are fitted with individual VE-COS consumer units, which connect back to the distribution board, by either:

(a) 32A plug and sockets, which are generally used on smaller complexes with low electrical Loading.

(b) Hard wiring each consumer unit back to the distribution board, which is used on larger complexes with higher electrical loading.

Installation: Each module is factory fitted with lighting, power and heating all protected by MCB's (mini circuit breakers) within the consumer unit.

Certification: All modules are pre-tested to comply with current Regulations, and are fully certified accordingly.