

SPECIFICATION OUTLINE:

1) ROOF AND WALL CONSTRUCTION:

- **Structural Insulated Panel System (SIPS):** 'U' - Value: **0.25 W/M²K** (multi-foil insulation specification achieves: **0.11 W/M²K**).
- External Western Red Cedar Timber Cladding is sourced from sustainable sources (FSC and PEFC certified **(A)**).
- Insulation is 80% Recycled. High-performance air-tight construction. Optional additional 'Tri-Iso Actis' multi-foil insulation for improved U-values.

2) DOORS / WINDOWS: Centre Pane Value 'U' - Value: 1.4 W/M²K (argon fill specification achieves: 1.1 W/M²K).

- Draught-sealed, oiled, hardwood screens from sustainable sources made by specialist manufacturer fitted with High performance units with double glazed coated low-emissivity (Low-E) glass **(B)** with min 16mm cavity.
- Optional Argon cavity fill available for improved thermal performance.
- Glazing (where necessary) has manifestation **(C)** to limit the incidence of collision and is toughened.
- Doors finger hinge protection to prevent finger trapping. Doors feature relevant fire safety instruction.
- Low thresholds to entrance doors permitting easy access for all.
- Casement fasteners to provide background ventilation.

3) GROUND FLOOR STRUCTURE: 'U' - Value: 0.25 WM²K.

- **Structural Insulated Panel System (SIPS):** flooring to individual requirements on prefabricated floor units pre-insulated with 80% Recycled 150mm mineral wool insulation.
- Optional protective sheathing to underside using 16-gauge galvanised steel vermin mesh if required.

4) FOUNDATIONS:

- Mini-Pile Concrete System (on 450 x 450 or 600 x 600mm base) with minimal ground disturbance.
- Alternative: Plinth foundation system (to rest on 600 x 600mm base) or screw-pile system available in areas with more challenging ground conditions.

5) FINISHES:

External:

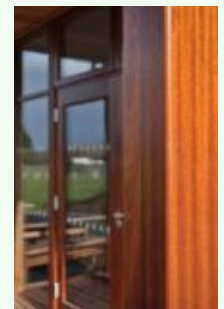
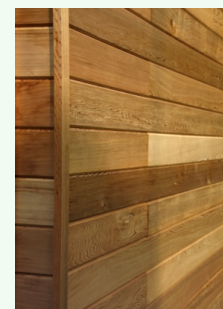
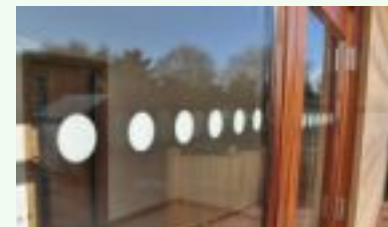
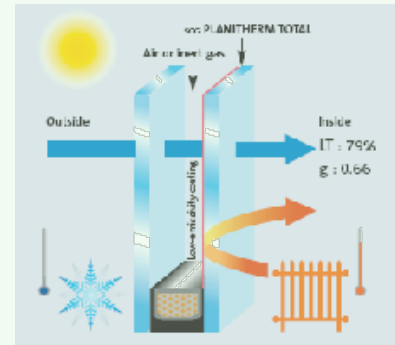
- All Red Western Cedar supplied in natural state **(D)** and left to naturally age (no toxic treatments required).
- Exposed hardwood window/door frames supplied in natural state and left to naturally age **(E)** (no toxic treatments required).
- Proprietary non-slip cladding to ramped approach and external deck areas to reduce accident risk.

Internal:

- Internal emulsion finishes to walls. Internal surfaces comprising walls, skirting, doors and ironmongery to be finished in contrasting colours in accordance with DDA recommendations. (Samples of finishes can be provided on request).
- Carpeting or non-slip vinyl to floors (supply and colour to client requirements). **(F)**

6) SERVICES & SANITARY:

- Provision of new electric supply
- Provision of consumer unit located at high level (to avoid tampering) within internal store area.



Ventilation & Cooling

- **Air-Source heat pump (larger schemes):** Class - **AA** rated wall-mounted remote controlled combined air-conditioning / air source heating (an ingenious system whereby heat is extracted from the atmosphere to provide heating - like a refrigerator circuit in reverse) with condenser unit mounted externally. **(G)**

Heating

- **Hot water** provided by instantaneous hot water units which heat water on demand (with significantly lower energy demands than storage units). Thermostatic control to prevent scalding. **(H)**
- **Space Heating:** A variety of heating options are available: Wall-mounted Low Surface Temperature (LST) electric heaters or alternatively LPG (bottled gas) heating available in areas with insufficient electrical supply. All emitters are low temperature to prevent burning incidents. **(J)**

Lighting and electrical

- Recessed T5 luminaires (part- L and CIBSE compliant **(K)**) system in areas with suspended ceiling grid (where used) with optional smart control.
 - Recessed 2 x 26w Compact Fluorescent (part- L and CIBSE compliant) low energy down-lighters elsewhere or
 - Suspended or surface mounted educationally -specific fluorescent luminaires.
 - External-quality recessed ultra-low watt (3w) LED soffit lights over decked areas. **(L)**
 - External and Internal emergency lighting (in accordance with BS 5266) as required.
 - Electrical provisions included and tailored to requirements.
 - Security alarm systems available.
- Heat detector/Smoke Alarm(s) included (in accordance with BS 5839 Part 1) with alarm-call points as required.

Sanitary -

A range of washroom and sanitary options are available to suite individual requirements:

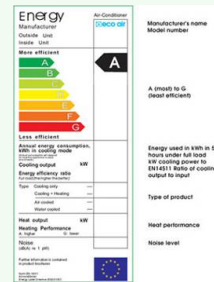
- Washroom areas to feature individual rooms or cubicle systems (with a range of options) as required.
- Facilities can be provided for ambulant (to include grab rails) or full wheelchair-accessible (to include 'document M' pack with white grab rails, seat and hinged arm support, alarm, etc) usage - with appropriate fittings included. **(M)**
- Washroom to feature sanitary equipment appropriate for users' age group for ease of use.
- Extracts provided to washroom areas.
- Taps feature 'lever arms' to aid usage. **(N)**
- Waste drainage included as required.

Intelligent, site specific design, high insulation values and energy saving technologies ensure a 'B' rating on those buildings requiring an Energy Performance Certificate (EPC).

(O)

Activities

The School Escape are offsetting its activities and CO² emissions generated with Climate Care **(P)**



(G)



(H)



(J)



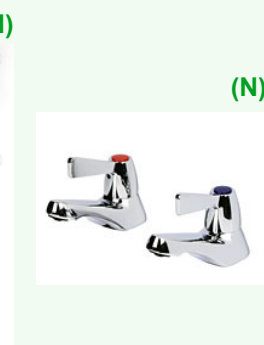
(K)



(L)



(M)



(N)



(O)



(P)

OPTIONS

Internal finish and specification:

- Optional built-in furniture available using modular 'under-bench' system to client requirements (can incorporate sinks, storage solutions, etc).
- Optional kitchen and kitchenette systems available (with range of fittings available including: microwave, combination-oven, sink with drainer, dishwasher, hob, etc (note: not all options may be available in same package)). **(Q)**
- Optional full acoustic package to meet requirements of BB93 for dedicated teaching spaces. Provided by suspended ceiling grid, acoustic panels or perforated ceiling boards **(R)**.
- Optional Heat Recovery Ventilation equipment (lessening space heating demands and improving internal environment by reducing build up of CO) provided by wall mounted unit.
- Optional baby change unit and range of WC / washroom layouts.

External and green technologies:

- Optional sedum / green roof for reduced run-off, biodiversity and habitat creation and stimulating aesthetics. **(S)**
- Optional multi-foil insulation for improved insulation values and thermal performance for wall and roof. (Achieves 0.11 W/M²K) **(T)**
- Optional roof-mounted sun pipe units to provide consistent natural daylight and lessen demands on artificial lighting. **(U-V)**
- Optional Photo Voltaic (PV) solar panel systems available to convert the sun's energy into electricity **(W)**.
- Optional rainwater harvesting **(X)** or water butts **(Y)** to reduce water consumption and strain on water and drainage resources.

(Q)

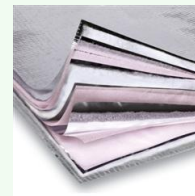


(R)



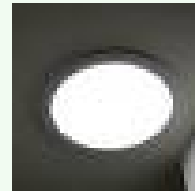
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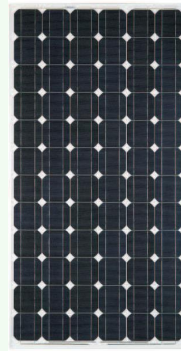
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(X)



(W)



(Y)



OPTIONS:

'GREEN FEATURES' IN SUMMARY: Virtually every component, material and constructional method used in the manufacture and assembly of the School Escape is selected with the environment in mind:

Foundation System

- Mini Pile system (or plinth or screw pile system) with minimal ground disturbance.

Walls and Roof construction

- Timber from certified, sustainable sources.
- 80% recycled insulation.
- Airtight, lightweight construction.
- Low U-values
- Optional multi-foil construction

Glazing

- Oiled Hardwood screens from sustainable sources. No toxic surface treatment.
- High performance coated Low E double glazed units.
- Argon filled option.
- Fully draught sealed.
- Optional strategically positioned 'light-pipe' units.

External Cladding

- Western Red Cedar from Sustainable sources (FSC and PEFC certified).
- Oiled or left to silver naturally.
- No toxic surface treatment.

Services

- Class-A rated equipment.
- Low energy lighting systems with optional smart control.
- Instantaneous water heating.
- Optional Air-Source heat pump space heating.
- Optional heat recovery ventilation unit.

Options

- Additional Fabric / Multi-Foil Insulation to achieve improved U-values and thermal performance of building fabric.
- Sedum Green Roof.
- Rainwater storage / recycling / re-use.
- Various renewable and energy saving technologies.

Activities

- The Garden Escape is offsetting its activities and CO₂ emissions generated with Climate Care.