

CEFN SAESON HIGH SCHOOL
NBS Specification – P10

	Name	Signature	Date
Designed by	BHJ		21/06/19
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Checked	AB		21/06/19
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NTS @ A4
SCALE & FORMAT
21/06/19
DATE OF 1ST ISSUE

PD – Issued for Construction
PROPOSED STATUS

26W007	PDA	00	ZZ	SP	A	P10	8793	C01
SITE	ISSUER	VOLUME	LEVEL	TYPE	ROLE	CLASSIFICATION	SEQUENCE	REV

This Booklet Contains :
Page 01: NBS Specification
P – Building fabric sundries
P10 – Sundry insulation/ proofing works

C01	25/09/19	DPM upgraded to Gas Membrane
P02	25/07/19	BREEAM 2018 VOC Requirement Update
P01	21/06/19	Issued for Information
Rev	Date	Revision Title
All Revisions		

P
Building fabric sundries

P10
Sundry insulation/ proofing work
Revision P03

Section Revision History

No.	Purpose	
P01	FIRST ISSUE TO VIEWPOINT	21st Jun 2019
P02	BREEAM 2018 VOC requirements added	25th Jul 2019
P03	DPM upgraded to gas membrane	25th Sep 2019

Clauses amended in Revision P03

No.	Clause	
115A	BELOW GROUND FLOOR SLAB INSULATION	Revised

P10 Sundry insulation/ proofing work**SUNDRY INSULATION/ PROOFING WORK**

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS. PRODUCTS AND MANUFACTURERS IN THIS SECTION CAN BE SUBSTITUTED FOR EQUAL AND APPROVED PRODUCTS

VOC performance requirements where relevant:

Interior paints and coatings

Emission limit Formaldehyde - = 0.06 mg/m³

Total volatile organic compounds (TVOC) - = 1.0 mg/m³

Category 1A and 1B carcinogens - = 0.001 mg/m³

Testing requirement - EN 16402 or ISO 16000-9 or EN 16516 or CDPH Standard Method v1.1

Wood-based products (including wood flooring)

Emission limit Formaldehyde - = 0.06 mg/m³ / = 0.08 mg/m³(MDF)

Total volatile organic compounds (TVOC) - = 1.0 mg/m³

Category 1A and 1B carcinogens - = 0.001 mg/m³

Testing requirement - ISO 16000-9 or EN 16516 or CDPH Standard Method v1.1 or EN 717-1 (formaldehyde emissions only)

Flooring materials (including floor levelling compounds and resin flooring)

Emission limit Formaldehyde - = 0.06 mg/m³

Total volatile organic compounds (TVOC) - = 1.0 mg/m³

Category 1A and 1B carcinogens - = 0.001 mg/m³

Testing requirement - ISO 10580 (52) or ISO 16000-9 or EN 16516 or CDPH Standard Method v1.1

Ceiling, wall, and acoustic and thermal insulation materials

Emission limit Formaldehyde - = 0.06 mg/m³

Total volatile organic compounds (TVOC) - = 1.0 mg/m³

Category 1A and 1B carcinogens - = 0.001 mg/m³

Testing requirement -ISO 16000-9 or EN 16516 or CDPH Standard Method v1.1

Interior adhesives and sealants (including flooring adhesives)

Emission limit Formaldehyde - = 0.06 mg/m³

Total volatile organic compounds (TVOC) - = 1.0 mg/m³

Category 1A and 1B carcinogens - = 0.001 mg/m³

Testing requirement EN 13999 (Parts 1-4) or ISO 16000-9 or EN 16516 or CDPH Standard Method v1.1

TYPES OF INSULATION**115A BELOW GROUND FLOOR SLAB INSULATION**

- Manufacturer: Kingspan Insulation Ltd.
 - Product reference: 80mm thick Kooltherm K103 Floorboard
 - To full extent of the below slab area of the building.
- Damp Proof Membrane: 1500 gauge CS2 Gas membrane polythene with taped laps (Revised - P10 revision P03 - 25th Sep 2019)

125A THERMAL BREAK INSULATED JOINT STEEL TO STEEL

- Manufacturer: Armadilo Noise and Vibration Ltd or similar approved.
 - Product reference: Armatherm FR.
- Material: Fabric reinforced Resin.
- Recycled content: Not applicable.
- Thickness: Dependant on thickness of insulation zone of the element through which it is passing.
- Installation requirements:
 - Installation standard: Where the steel passes through roof zones the break is to achieve an R-value of 6 W/m²K. where it passes through wall zones it is to achieve a R-value of 4W/m² K.

225A SOUND ABSORBING INSULATION MEDIUM DENSE QUILT AROUND SERVICE PENETRATIONS ALSO PROVIDING 30 MINUTES FIRE RESISTANCE

- Location: Within the service penetration zone.
- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Rockwool Sound Insulation.
- Material: Rock BS EN 13162.
- Recycled content: Not applicable.
- Density (minimum): 50kg/m³.
- Thickness: To suit sound pugging situation.
- Installation requirements:
 - Loose insulation is to be lightly packed within voids surrounding service penetrations and within extended acoustic boxing ensuring complete blockage of sound transmission through the penetration

230A SOUND ABSORBING INSULATION MEDIUM DENSE QUILT PACKED INTO VOIDS ABOVE LINE OF MOVEABLE WALLS

- Location: To voids above movable wall in the main building.
- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Rockwool RW45 rigid to beam voids and semi-rigid to other areas.
- Material: Rock BS EN 13162.
- Recycled content: Not applicable.
- Density (minimum): 50kg/m³.
- Thickness: 50 & 75mm.
- Installation requirements:
 - Loose insulation is to be lightly packed within voids surrounding steelwork, purlins and head track within extended acoustic boxing ensuring complete blockage of sound transmission through the penetration. In combination with the plasterboard boxing is to achieve a weighted sound reduction of 55dB Rw.

235A SOUND ABSORBING INSULATION DENSE QUILT LAID ACROSS SUPPORTS

Location: To gap around sportshall.

Manufacturer:

ROCKWOOL Ltd.

- Web: www.rockwool.co.uk.
- Email: info@rockwool.com.
- Product reference: Rockwool RW3 semi rigid batts.
- Material: Rock BS EN 13162.
- Recycled content: Not applicable.
- Density (minimum): 60kg/m³.
- Thickness: 75mm.
- Installation requirements:
- Loose insulation is to be lightly packed within voids over pressed metal straps fixed at approximately 600mm centres, services passing through insulation are to be tightly wrapped and wired stitched with the insulation to ensure a homogenous acoustic barrier

410 FLEXIBLE CAVITY BARRIERS

- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Rockwool Cavity Barrier.
- Material: Wired mineral wool.
- Fire resistance rating: To BS 476-20, 30/15 integrity/ insulation .
- Installation requirements:
 - Spacing: Installed in voids so the maximum unobstructed dimension in any direction is 20 m.
 - Fixing: Secure at perimeters and joints with no gaps, to provide a complete barrier to smoke and flame.

415A FLEXIBLE ACOUSTIC CAVITY BARRIERS

- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Rockwool Cavity Barrier.
- Material: Wired mineral wool with foil face.
- Acoustic insulation performance Two barriers suspended alongside each other with foil faces achieving 50 dB Rw .
- Installation requirements:
 - Fixing: Secure at perimeters and joints with no gaps, to provide a complete barrier to sound

420 SLEEVED MINERAL WOOL SMALL CAVITY BARRIERS

- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Rockwool TCB Cavity Barrier.
- Material: Mineral wool sleeved in polyethylene with flanges.
- Fire resistance rating: To BS 476-20, 30/15 or 60/30 integrity/ insulation.
- Size: To suit individual detail.
- Installation requirements:
 - Fasteners: Staples at maximum 150 mm centres.
 - Vertical barriers: Fixed by both flanges.
 - Horizontal barriers: Fixed by upper flange only.
 - Joints and intersections: Butted, with barriers compressed along full length to give complete seal.

440 FIRE PROTECTION

- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Intumescent expansion joint seal.
- Material: Mineral wool and graphite based intumescent.
- Thickness: 75mm.
- Fire resistance rating: To BS 476-21, 30/30 integrity/ insulation.
- Number of layers: 1.
- Installation requirements: Continuous, with minimum joints.
 - Fasteners: Self holding within joint.
- Other requirements: None.

442A FIRE PROTECTION TO SERVICE RISERS AND SERVICE OPENINGS THROUGH FIRE WALLS

- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Ablative Coated Batt.
- Material: Mineral wool and ablative intumescent coating.
- Thickness: 50mm.
- Fire resistance rating: To BS 476-21, 30/30 integrity/ insulation.
- Number of layers: 1.
- Installation requirements: Continuous, with minimum joints.
 - Fasteners: Intumescent sealer to perimeters of service openings.
- Other requirements: Services to be intumescent sealed to intumescent batt.

445A FIRE PROTECTION TO HEADS OF WALLS AND EXTERNAL WALL LININGS

- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Linear and Trapezoidal Fire Stop System.
- Material: Mineral wool.
- Thickness: 100mm.
- Fire resistance rating: To BS 476-21, 30/30 integrity/ insulation.
- Number of layers: 1.
- Installation requirements: Continuous, with minimum joints.
 - Fasteners: Tight fit into floor deck profile, (contractor to notify Rockwool of the floor deck specification when ordering).
- Other requirements: Linear batt may need to be installed between top of lining and underside of floor deck to ensure total fire protection.

448A FLEXIBLE CAVITY BARRIERS

- Manufacturer: ROCKWOOL Ltd.
 - Web: www.rockwool.co.uk.
 - Email: info@rockwool.com.
 - Product reference: Rockwool Cavity Barrier Slab.
- Material: Mineral wool batts.
- Fire resistance rating: To BS 476-20, 30/15 integrity/ insulation .
- Installation requirements:
 - Spacing: Installed in voids so the maximum unobstructed dimension in any direction is 20 m.
 - Fixing: Secure at perimeters and joints with no gaps, to provide a complete barrier to smoke and flame perimeters and joints between batts are to be sealed with Rockwool LUL intumescent sealant.