H21 TIMBER WEATHERBOARDING

To be read with the Preliminaries A10-A55 /General conditions and Z10 and Z10 APP FSC.

GENERAL

TYPE(S) OF TIMBER WEATHERBOARDING

110B TIMBER RAINSCREEN WEATHERBOARDING TO EXTERIOR WALLS

Reference Drawing(s): [\_\_\_\_\_\_],

Location: [\_\_\_\_\_\_\_\_],

Environmental Credentials:

Country of origin and manufacture: Europe grown hardwood, UK manufacture.

Attributes:

Breathing product for use outside of breathing wall construction,

Natural content: High,

Background:

Steel stud framework to G10/110\_, at 600 mm. centres

Breather sheathing board: As clause G10/871,

Battens: See H21/135,

Batten fasteners: See H21/136,

Corner posts: See H21/117,

Corner post fasteners: See H21/118,

Aluminium flashing above openings: See H21/121,

Boards: to H21/113,

Species European Oak to H21/112,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Board Fasteners to H21/115,

Installing: to H21/360,

Finish: None.

110C EXTERNAL WEATHER BOARDING TO [\_\_\_\_\_\_]:

Reference Drawing(s): [\_\_\_\_\_\_],

Location: [\_\_\_\_\_\_],

Background: timber stud framing to G20/\_\_\_\_ at 600 mm. centres,

Battens: See H21/135,

Batten fasteners: See H21/136,

Size: 50 x 25 mm.

Boards: to H21/113,

Species European Oak to H21/112,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Board Fasteners to H21/115,

Installing: to H21/360,

Finish: None.

Routing: specially routed at fastenings to accommodate washer,

Finish: None.

110D EXTERNAL WEATHER BOARDING TO DOORS IN EXTERNAL WALL:

Reference Drawing(s): [\_\_\_\_\_\_],

Location: [\_\_\_\_\_\_],

Background: Doors to L20/270\_,

Battens: See H21/135,

Batten fasteners: See H21/136,

Size: 50 x 25 mm.

Boards: to H21/113

Species European Oak to H21/112,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Board Fasteners to H21/115,

Installing: to H21/360,

Finish: None.

Routing: specially routed at fastenings to accommodate washer with room for moisture movement,

Finish: None.

111 TIMBER SUN SCREEN FIXED TO ALUMINIUM CURTAIN WALLING:

Reference Drawing(s): [\_\_\_\_\_\_],

Location: [\_\_\_\_\_\_],

Background: Fixed to/through curtain walling with purpose made brackets by curtain walling manufacturer,

Any additional supports to be purpose made,

Material: Austenitic stainless steel, See work section Z11.0 & Z11.3,

Grade: Marine 316 equivalent,

Access to clean glass behind screen to be via arms through spaces between slats,

Material: unseasoned, untreated European Oak,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Class 2,

Size: see Drawings,

Spacing: Mullions in line with curtain walling mullions,

Setoff: from face of glass to back face of timber screen: See Drawings.

Horizontal Blades:

Profile:

Rectangular with drips on underside at both edges,

Top face sloping 8 degrees to encourage rainwater run-off, away from glass,

Material: unseasoned, untreated European Oak,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Class: 2,

Finish: None.

112 CLASS:

To BS 1186:Part 3 Class 2 subject to the following:

Exclude all sapwood.

No wane on board edges.

No knots on the edges,

No arris knots,

No margin knots,

No splay knots.

Knots to be smaller than one fifth of board width,

Knots to be minimum 15 mm. from edges,

The long grain shall not slope more than 1:8.

113 BOARDS:

Reference Drawing(s): [\_\_\_\_\_\_\_\_],

Material: unseasoned, untreated, European Oak, See A90/115,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Class: See H21/112,

Board size: ex 125 mm. finished size face height: 99 x 25 mm. nominally,

Vertical spacing: See Drawings,

Horizontal gap between each horizontal boards: 11 mm.

Appearance: cladding to be divided into equal width boards and equal width spaces.

Vertical gap at ends: 8 mm.

Surface Face Texture to weatherboarding: to be determined by sample pieces selected from:

 fine saw cut face,

 fine planed face.

Profile: cut from board so that the heart of log would be outside of building,

Bottom edge of boards to have 5 mm. narrow flat edge for drip development away from top of board below,

Gap between boards to be narrower at the outer face and wider at the inner face to discourage capillary action between sloping faces,

Top edge planed at 45 degrees, down towards outside,

Bottom edge planed at 40 degrees, down towards outside leaving 5 mm. wide horizontal edge,

Provide relief grooves to be to back of boards.

Boards to align end to end with 8 mm. gap between board ends, fastenings at nominal 587.5 mm. centres.

Moisture Content: Green to BS 5756: Unlimited,

Preservative treatment: None.

Fasteners: to H21/115,

Method of fixing: to H21/360.

114 BOARD FASTENINGS:

Design of fixing to allow for shrinkage as recommended by timber supplier.

Cladding Boards: 2 No. fasteners at both ends of board and at every intermediate support,

Type: Screws with washers, to allow timber shrinkage movement (7-14 %)

Head profile: [\_\_\_\_\_\_\_\_],

Size: 50 mm. long through 20 mm. boards with washer recessed into board face,

Gauge 10,

Head: dome head cross top to BS 6605,

Reference: pozi-drive,

Manufacturer: Phillips,

Material: stainless steel,

Grade: Marine 316 equivalent,

Thread: parallel thread,

Washers: slotted hole washers,

Size: 19 mm. diameter,

Thickness to transfer loads and resist distortion,

25 x 6 mm. countersunk holes and 68 mm. stainless steel screws.

115 BOARD FASTENING SCREWS:

Type: Countersunk, square socket head, screws, square socket for maximum torque, self drill wood removing cut out,

Manufacturer: Board Walk Timber Decking Co. Ltd. See H21/309C,

Reference: Finishing deck screws,

Material: Austenitic stainless steel,

Grade: Marine 316 equivalent,

Size: No. 7 x length to suit.

Fixing: Use 2 No. screws, per support point, drive into the outer grooves and finish flush.

116 BREATHING SHEATHING BOARD: See G10/871.

117 CORNER POST:

External corner posts:

Size: ex 100 mm. square posts,

With 43 x 20 mm. rebates on 2 adjacent sides for boards,

internal corner rebated to fit structural wall,

Material: unseasoned (air dried), untreated European Oak, See A90/115,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Class: See H21/112,

Surface Face Texture to match weatherboarding: to be determined by sample pieces, selected from:

fine saw cut face,

fine planed face.

Gap between Post and board ends: 8 mm. gap between board ends,

Moisture Content: Green to BS 5756: Unlimited,

Preservative treatment: None.

Fasteners: to H21/118.

118 CORNER POST FASTENINGS:

Corner Post: Two fasteners recessed 20 mm. into post face with pellet cover.

Type: Screws with slotted hole washers,

Size: 150 mm. long through 100 x 100 mm. corner post, with washer recessed into post face,

Gauge 10,

Head: dome head cross top to BS 6605,

Reference: pozi-drive,

Manufacturer: Phillips,

Material: stainless steel,

Grade: Marine 316 equivalent,

Thread: parallel thread,

Washers: slotted/hole washers,

Size: 19 mm. diameter,

Thickness to transfer loads and resist distortion,

135 TIMBER BATTENS:

Quality: free from decay, insect attack (except pinholes borers) and with no knots wider than half the width of the section.

Species: See A90/115,

Douglas Fir, preservative treated,

 Unseasoned untreated European Oak, Class 2,

FSC Certified timber with FSC Chain of Custody See Work section Z10 and Appendix APP FSC

Quality of timber and fixing: To BS 1186:Part 3.

Size: 50 x 25 mm. 50 x 38 mm. and 75 x 38 mm. sawn and regularized, See Drawings,

Moisture content at time of fixing: Not exceeding 24%.

Screw battens to metal or timber studs. Do not use nails.

Use double battens at column positions,

Form a 38 mm. ventilation cavity,

Ensure the cavity is free from any blockages which could restrict air flow behind oak boards.

Fix battens to studs at nominal 487.5 mm. centres with fastenings to H21/136.

Battens: Fix at 600 mm. centres to studs through breathing sheathing board.

136 BATTEN FASTENERS:

Spacing: not more than 600 mm. centres to every intermediate support and not less than 75 mm. from end of batten.

Type: Screws,

Size: 75 mm. long through 38 mm. battens countersunk into batten face,

Gauge 12,

Head: countersunk cross top to BS 6605,

Reference: pozi-drive,

Manufacturer: Phillips,

Material: stainless steel,

Grade: Marine 316 equivalent,

Thread: parallel thread,

Washers: Cup washers,

Size: 19 mm. diameter,

Thickness to transfer loads and resist distortion,

WORKMANSHIP

209 MATERIALS EUROPEAN OAK BOARDING AND DOUGLAS FIR BATTENS:

See Appendix APP FSC and APP H21

209C MANUFACTURER: FASTENINGS:

See Appendix APP H21 and APP Z20

SAMPLES/CONTROL SAMPLES/MOCK-UPS

240 FULL SIZE MOCK UP CLADDING:

Construct in a CA approved location, a full size mock-up of external wall including:

timber cladding between bottom sill and top capping

from external corner to trims at opening,

showing board profile, layout, selected surface texture, fastenings and finishes,

for the purpose of reviewing material quality and workmanship, testing fixings and weather resistance.

All materials may be reused in the building if undamaged

360 FIXING BOARDING:

Fix boards securely to give flat, true surfaces free from undulations, lipping, splits, hammer marks and protruding fastenings.

Allow for movement of boards and fastenings to prevent cupping, springing, excessive opening of joints or other defects.

Position heading joints centrally over supports and not less than two board widths apart on any one support.

Punch nail heads below surfaces that will be visible in the completed work.

361 FIXING AND FASTENING:

Boards:

Drill Holes oversized (10 mm. diameter) to allow for board shrinkage and moisture movement.

Route recess minimum 6 mm. into face for washers,

Arrange washer slots to be vertical on horizontal boards,

Arrange washer slots to be horizontal on vertical boards,

Position washers centrally before tightening,

380 PELLETS & CORNER PELLETS

All pellets to be short grain (nominal 12 mm. diameter) minimum 10 mm. deep. moisture content to be same as board being fixed.

Pellets to be cut from same material as boards with grain to run in same direction as board.

Holes to be bored with scoring drill bit.

Pellets to be inserted fully filled with waterproof adhesive applied to manufacturer’s instructions.

Pellets to be planed flush to board face.

END OF WORK SECTION H21 TIMBER WEATHERBOARDING

Appendix/Clause(s) on previous page(s)

NB: NOTES ON EDITING SPECIFICATIONS:

Use as guidance, a standalone appendix or merge into work section.

Delete all of the Information on this and other pages of guidance notes, excluding the page break above, down to the end of **NBS** compatibility URLs (website addresses), when adding this work section or clauses to a project specification or purchase order.

Edit the clauses by selecting the clauses required, deleting any not required, by editing the [blue text which often describes options available] within square brackets to suit the project; or edit the specification to suit the procurement method.

Remove all square brackets using search for [ and replace with nothing and search for ] and replace with nothing.

Replace blue text with black text by selecting all and choosing auto or black colour text.

There are clauses in Red text in the Specification these are examples of project specific versions of the generic clauses that are included for guidance and are likely to be deleted or edited if they are useful to the project.

Remove any grey tone by selecting all text, and select Format > Borders and Shading > Shading > No fill > Okay.

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**REV Revisions**

|  |  |  |  |
| --- | --- | --- | --- |
| Revision No. | Description | Author | Date |
| A00 | Created in NBS SpecManExtracted from NBS BuildingFor DRAFT issue to post on GreenSpec website for review | BRM | 10/08/2006 |
| A01 | Issue to AEP | BRM | 01/12/2012 |
| A02 | Terms and Conditions etc. addedUpdate file nameUpdate headers and footers, © and start dateReviewed, post on Website | BRM | 10/12/2012 |
| A03 | Resaved and named file to: GBS H21 Timber Weatherboarding Rainscreen RSWS Working.docxUpdated to GBS for GBE websiteTerms and Conditions etc. addedUpdate headers and footers, © and start dateReviewed,  | BRM | 05/07/16 |
| A03 | Issue to post on GBE WebsiteGBS H21 TimberWeatherboardingRainscreen RSWS A03BRM050716.docx | BRM | 05/07/16 |
|  | Pending |  |  |
|  | Consider version for Uniclass 2012 or 2015 elemental classification |  |  |

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**Addenda**

**NBS compatibility**

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NGS’s Green Building Specification (GBS) and Robust Specifications (GBS RS) are designed to complement NBS.

NGS clauses are written specifically to address issues of environmental sustainability.

NBS adopts and develops the Construction Project Information Committee’s (CPIC) classification system Common Arrangement of Work Sections (CAWS) 1998 edition.

GBS adopts and develops the CPIC and NBS versions of CAWS to enable integration into NBS-based specifications.

GBS adopts NBS clause numbering to provide for easy clause assimilation.

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