



OUR TOWN HALL

L30 NBS SPECIFICATION

STAIRS/ LADDERS/ WALKWAYS/ HANDRAILS/ BALUSTRADE

Document reference: OTH-PUR-TH-ZZ-SPE-A-5912

Date: 24/01/2022

Status: For
Construction

Issue: 04

CLAUSE SUFFIX LETTERS

This Purcell Specification is based upon the National Building Specification (NBS). The Contractor's attention is drawn to the suffix letters **A**, **B** and ***** that occur after some of the clause numbers in the work sections.

These suffix letters are used as follows:

***** is used for a new clause, not found in the NBS

A is used for an NBS clause which has been altered in the Purcell Standard Specification.

B is used for a new clause in this particular Job Specification or against an existing clause from the Purcell Standard Specification amended for this project.

No liability is accepted for the incorrect application of this convention in this Specification.

Rev	By	Description	Date	Authorised
-	VT	FOR TENDER	27/03/2020	NM
01	RO	FOR TENDER	14/08/2020	RB
02	DW	Clauses Added 640A 920	18/12/2020	NM
03	AB	FOR CONSTRUCTION	26/11/2021	AB
04	AH	Clause added 583	24/01/2022	AB

L30

Stairs/ ladders/ walkways/ handrails/ balustrades

L30 Stairs/ ladders/ walkways/ handrails/ balustrades

To be read with Preliminaries/ General conditions.

PRELIMINARY INFORMATION/ REQUIREMENTS**115 TIMBER PROCUREMENT**

- Timber (including timber for wood based products): Obtained from well managed forests and/ or plantations in accordance with:
 - The laws governing forest management in the producer country or countries.
 - International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
- Documentation: Provide either:
 - Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied.
 - Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.
- Certification scheme: Forest Stewardship Council (FSC).
 - Other evidence: None.

130A SITE DIMENSIONS

- Procedure: Before starting work take site dimensions, record on shop drawings and use to ensure accurate fabrication.

COMPONENTS**551 PURPOSE MADE BALUSTRADES Guarding Type 1,2,3 if handrail type 1 and 3a**

- Component material, grade and finish as delivered:
 - Guarding: Mild steel guarding and mild steel fascia with coating as M60 175A and M60 119A.
 - Handrails: If handrails required, refer to PURPOSE MADE HANDRAIL section for details.
- Workmanship:
 - Metalwork: To section Z11.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
- Fixing: Anchor fixed to structure.
 - Centres: 93mm centers.

571 PURPOSE MADE HANDRAILS Handrail Detail for Type 1

- Component material, grade and finish as delivered:
 - Handrails: Hardwood European White Oak or similar approved profiled handrail with oiled finish and painted cast iron as M60 119A.
 - Brackets: Painted cast iron.
 - Guarding: [Mild steel guarding and mild steel fascia with coating as M60 175A and M60 119A. 93mm centers
- Workmanship:
 - Joinery: To section Z10.
 - Metalwork: To section Z11.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
- Fixing: Side fixed to brass powder coated mild steel fascia.
 - Centres: 560mm centers - always allow for 1no. fixing where handrail ends with flat portion.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for details.

572 PURPOSE MADE HANDRAILS Handrail Detail for Type 2a

- Component material, grade and finish as delivered:
 - Handrails: Hardwood European White Oak or similar approved profiled handrail with oiled finish and painted cast iron as M60 119A.
 - Brackets: Painted cast iron.
 - Guarding: n/a
- Workmanship:
 - Joinery: To section Z10.
 - Metalwork: To section Z11.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
- Fixing: Countersunk screw side fixed to wall.
 - Centres: 560mm centers - always allow for 1no. fixing where handrail ends with flat portion.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for detail.

573 PURPOSE MADE HANDRAILS Handrail Detail for Type 2b

- Component material, grade and finish as delivered:
 - Handrails: Hardwood European White Oak or similar approved profiled handrail with oiled finish and painted cast iron as M60 119A.
 - Brackets: Painted cast iron.
 - Guarding: n/a
- Workmanship:
 - Joinery: To section Z10.
 - Metalwork: To section Z11.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
- Fixing: Countersunk screw side fixed to wall.
 - Centres: 500mm centers - always allow for 1no. fixing where handrail ends with flat portion.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for details.

574 PURPOSE MADE HANDRAILS Handrail Detail for Type 3a

- Component material, grade and finish as delivered:
 - Handrails: Hardwood profiled handrail with oiled finish and painted cast iron as M60 119A.
 - Brackets: Painted cast iron.
 - Guarding: Mild steel guarding and mild steel fascia with coating as as M60 175A and M60 119A. 83mm centers.
- Workmanship:
 - Joinery: To section Z10.
 - Metalwork: To section Z11.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
- Fixing: Top fixed to top element of mild steel guarding.
 - Centres: 500mm centers - always allow for 1no. fixing where handrail ends with flat portion.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for details.

575 PURPOSE MADE HANDRAILS Handrail Detail for Type 3b

- Component material, grade and finish as delivered:
 - Handrails: Hardwood European White Oak or similar approved profiled handrail with oiled finish and painted cast iron as M60 119A.
 - Brackets: Waxed Metal, finished as per Finishes Schedule.
 - Guarding: n/a
- Workmanship:
 - Joinery: To section Z10.
 - Metalwork: To section Z11.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
- Fixing: Anchor fixed to treads.
 - Centres: 570mm centers - always allow for 1no. fixing where handrail ends with flat portion.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for details.

576 PURPOSE MADE HANDRAILS Handrail Detail for Type 6

- Component material, grade and finish as delivered:
 - Handrails: Hardwood profiled handrail with oiled finish and painted cast iron as M60 119A.
 - Brackets: Waxed Metal, finished as per Finishes Schedule.
 - Guarding: Allow for bespoke woven mesh infills strapped to existing banisters. Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 for details.
- Workmanship:
 - Joinery: To section Z10.
 - Metalwork: To section Z11.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
- Fixing: Strapped to existing handrail.
 - Centres: 600mm centers - always allow for 1no. fixing where handrail ends with flat portion.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for details.

581 PROPRIETARY HANDRAILS Handrail Detail for Type 4

- Manufacturer: Delta Balustrades.
 - Product reference: Orbis.
- Component material and finish as delivered:
 - Handrails: Hardwood with oiled finish.
 - Brackets: Mild steel as M60 175A and M60 119A.
 - Guarding: D Lug fitting as M60 175A for bespoke woven mesh infill panel.
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
 - Fixing: Standard fixing to stair with cover rose.
 - Centres: 1100mm.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for details.

582 PROPRIETARY HANDRAILS Handrail Detail for Type 5

- Manufacturer: Delta Balustrades.
 - Product reference: Orbis.
- Component material and finish as delivered:
 - Handrails: Hardwood European White Oak or similar approved with oiled finish.
 - Brackets: Mild steel as M60 175A and M50 119A.
 - Guarding: n/a
 - Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.
 - Fixing: Radius wall bracket with cover rose.
 - Centres: 1100mm.
 - Please refer to drawing series OTH-PUR-TH-LG-DWG-A-5152 to 5160 for Handrails ID Plans containing all tags associated with handrails schedule OTH-PUR-TH-ZZ-SCH-A-5236, which illustrates where different types occurs.
 - Please refer to OTH-PUR-TH-ZZ-DWG-A-5149 to 5151 for details.

583 DECORATIVE WIRE MESH INFILL conference room

- Manufacturer: Hightop metal Mesh
- Product reference: HTAR – 067 diamond metal mesh
- Metal mesh in darkened stainless steel

INSTALLATION

600 FABRICATION

- Workshop drawings to be submitted by fabricator and approved by architect prior to fabrication for all purpose made fixtures.

610 MOISTURE CONTENT

- Temperature and humidity: Monitor and control internal conditions to achieve specified moisture content in wood components at time of installation.

620 PRIMING/SEALING/PAINTING

- Surfaces inaccessible after assembly/installation: Before fixing components, apply full protective/decorative treatment/coating system.

630 CORROSION PROTECTION OF DISSIMILAR MATERIALS

- Components/ substrates/ fasteners of dissimilar materials: Isolate using washers/ sleeves or other suitable means to separate materials to avoid corrosion and/ or staining.

640 INSTALLATION GENERALLY

- Fasteners and methods of fixing: To section Z20.
- Structural members: Do not modify, cut, notch or make holes in structural members, except as indicated on drawings.
- Temporary support: Do not use stairs, walkways or balustrades as temporary support or strutting for other work.
- Applied finishes: Substrates to be even, dry, sound and free from contaminants. Make good substrate surfaces and prepare/ prime as finish manufacturer's recommendation before application.

640A FIXINGS GENERALLY

- Fasteners and methods of fixing: To section Z20.
- For fixing down of balusters install 4No. M12 HILTI HAS-U bolts at spaced equally around post with minimum 75mm spacing and 100mm embedment. For concrete resin fix with HILTI HIT-HY200 Resin or bolt through timber structure with washers below bolt heads.
- For fixing of handrails install 3No. M8 HAS-U bolts with 55mm spacing and 100mm embedment into masonry wall (excluding finishes) fixed using HIT-HY270 resin or bolted through timber structures with washers below bolt heads.

COMPLETION

920 DOCUMENTATION

- Contents:
 - Copies of structural design calculations/ test reports.
 - General product information.
 - Installation information.
 - Inspection and maintenance reports.
- Number of copies: Electronic Copies via document control system.
- Submission: Two weeks prior to date when Contractor expects work to be practically complete.