

SECTION 04210 BRICKWORK

NOTE: IF CHIMNEYS/FLUES ARE SPECIFIED, PLEASE REFER NCC TO PROVIDE FLUE DAMPER. PROVIDE WALL TYPES DRAWINGS SHOWING INTERNAL AND EXTERNAL WALLS AND WALL THICKNESS, FIRE, THERMAL AND SOUND PERFORMANCE RATINGS, VAPOUR PERMEABLE WATERPROOFING MEMBRANES AND ACOUSTIC RATINGS AS REQUIRED. COORDINATE WITH THE FINISHES SCHEDULE.

SCOPE OF WORK *Perform work described here and shown on drawings including but not limited to:*

Provide all brickwork to locations shown on the drawings.

The installations are to include but not limited to the following brickwork types:

Structural and non-structural brickwork.

Face brickwork.

Rendered brickwork.

Brickwork associated with landscape works.

Read this trade section in conjunction with the Finishes Schedules.

Supply labour and install materials including insulation to cavity where specified.

Include staging, scaffolding and cleaning.

COOPERATE WITH THESE OTHER TRADES *to resolve possible problems before starting work*

Concrete, structural steel, sealants.

Associated documents

Read this trade section in conjunction with the following:

NCC report for fire rating requirements for each of the listed wall types.

Wall types drawings for performance of the listed wall types.

Finishes Schedule..

Structural engineering documentation for provision of wall stiffeners etc.

COMPLY WITH APPLICABLE CLAUSES OF THESE AUSTRALIAN STANDARDS *Current edition.*

AS/NZS 1170 Structural design actions. *There are many parts, 2002 – 2011, Supplements and Amdts 2005 – 2018.*

AS 1316 2003 (R2016) Masonry cement.

AS/NZS 1576 Scaffolding. *There are 6 parts, 1995- 2016.*

AS 1657 2018 Fixed platforms, walkways, stairways and ladders - Design, construction and installation.

AS 1672.1 1997 (R2016) Limes and limestones – Limes for building.

AS/NZS 2699 Built-in components for masonry construction. *There are 3 parts, 2000 – 2002. 2699.1 2000 Wall ties.*

AS/NZS 2904 1995 Damp-proof courses and flashings. *There are 2 Amdts, 1998, 2013.*

AS 3700 2018 Masonry structures.

AS 3959 2018 Construction of buildings in bushfire-prone areas.

AS 3972 2010 General purpose and blended cements.

AS/NZS 4455 Masonry units, pavers, flags and segmental retaining wall units. *There are 3 parts, 2008 - 2010*

AS 4773 2015 Masonry in small buildings.

4773.1 Design.

4772.2 Construction.

Comply throughout with the current edition of the NCC.

MATERIALS AND COMPONENTS

NOTE: ENSURE THAT IMPORTED PRODUCTS HAVE WRITTEN TEST EVIDENCE OF COMPLIANCE WITH THE REQUIREMENTS OF RELEVANT AUSTRALIAN STANDARDS AND NCC PERFORMANCE GUIDELINES.

Brickwork type	Requirements	Comments
Structural brickwork		Refer to structural engineer's documentation
Face brickwork		
Rendered brickwork		
Others		

Structural brickwork

Refer to structural engineer's specification for structural components to this type of brickwork and to the Finishes Schedule for the type of brickwork for designated locations.

The brickwork is to be provided to an approved control panel with the following shown and approved by the architect:

Provide brickwork of the listed type and to an approved colour variation.

Brickwork joint type and grout colour.

Brickwork weephole configuration (install weephole inserts where specified).

Structural components such as lintels and steel structural supports.

Face brickwork

Provide to an approved control panel and incorporate into the works once approved.

Rendered brickwork

Provide to an approved control panel and incorporate into the works once approved.

SPECIFY HERE

LOCATION:

TYPE:

REQUIREMENTS.

PLEASE NOTE CHECKLIST FOR THIS TRADE SECTION. IT LISTS SPECIFIABLE ITEMS YOU MAY WISH TO INCLUDE.

Item	Description	Manufacturer/Supplier
Bricks		IDENTIFY
Sizes		
Colour		
Specials		
Sizes		
Colour		
Mortar	6 parts sand, 1 part cement, 1 part lime	
Pigment for mortar		
Reinforcement	Galvanised mesh	
Wall ties		
Damp proof course		
Expansion (control) joints		
Lintels	See engineer's detail	
Masonry expansion ties		
Anchors to columns or beams		

NOTE: FOR DOUBLE-BRICK, SPECIFY INSULATION FOR WALL CAVITIES USING VAPOUR PERMEABLE MATERIALS THAT DO NOT ABSORB OR WICK MOISTURE BETWEEN THE INTERNAL AND EXTERNAL BRICKWORK. MATERIALS MAY BE TREATED MINERAL WOOL, EPS CAVITY WALL INSULATION OR APPROVED INSULATING FILMS.

SUBMISSION

Submit samples, provide control panel and provide shop drawings for each brickwork wall type.

Obtain approval prior to commencing work.

Samples

Provide four brick samples for each of the listed brickwork types. Provide samples of all accessories for this trade section such as flashings and DPC's.

Shop drawings

Provide shop drawings for location of weep holes as shown on the control panel and technical data sheets for provision of treatment for brickwork if and where required.

Structural components

Coordinate the brickwork trade with installation of structural steel components such as lintels and wall stiffeners as listed on structural engineer's documentation.

Efflorescence control

Provide method statement for efflorescence control for each of the listed face work types. Obtain approval from the architect on adequacy of the efflorescence control measures.

PREPARATION *Inspect conditions at site before starting work*

Before commencing on site, review services owner requirements for working on, near or over services, documentation on existing services, locate and identify existing services before working over or near them so as not to damage them.

Review manual and materials handling to ensure OHS&E has been considered and controls documented.

Review work with other trades, piping, ducts etc. Clean base before laying masonry. Set doors and windows plumb and brace. Construct a sample wall of 3 square metres. Stop. When approved by architect, continue.

ON-SITE ACTIONS *Start of work means total acceptance of conditions.*

All work to approved submission of samples and control panel installations. Once approved the control panel is to be incorporated into the works.

Follow the recommendations of the manufacturer of any hazardous chemical/substance, in particular, the storage, decanting, mixing, use and disposal. Ensure statutory hazards and risks have been identified and managed in compliance with statutory requirements.

Machine mix. Mortar life: 2 hours. Joints: **IDENTIFY** tooled, struck, recessed, **OTHER**. Weep holes at 1200mm centres.

Bonding: Stretcher bond, **OTHER:** Bed joints: 10mm. Install DPC, wall ties, reinforcement, flashing to AS 3700. Install ties to anchor masonry to structure, doors, windows etc. Remove mortar from wall ties in cavity walls at the end of each day. Construction joints at max. 6000mm centre. Clean with 5% hydrochloric acid solution to face work wash down with clean water following. Bagged finish on completion same material as for mortar.

CONSULT STRUCTURAL ENGINEER RE LINTEL TABLE.

Hot dip galvanised lintels in external openings and to the approval of the structural engineer.

ADD HERE, IF REQUIRED, MORE TRADE INSTRUCTIONS SPECIFIC TO THIS PROJECT.

COMPLETION

Complete work in accordance with instructions and written variation orders. Certify each of the wall types for compliance with the listed fire, thermal and sound rating levels as applicable.

Carry out all necessary remedial work to ensure compliance.

END OF SECTION