CHAPTER 7
CONSTRUCTION DETAILS
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Drawings depicting details of damp proof courses, weepholes, lintels, roof ties to walls, etc. are supplemented by specifications used to translate designs into physical reality. Detailing is therefore an important link between good design and quality construction. The construction details that follow are examples of sound acceptable practice.

7.1 - External facebrick cavity wall and surface bed junction

NOTES
**7.2 - External facebrick solid wall and surface bed junction**

**INTERIOR FOR APPLICATION IN WET CLIMATES**
- Outer face of inner leaf of brickwork to be bagged and painted with no. 2 coats of bituminous paint
- One coat cement plaster
- Floor finish on 25mm cement screed
- 75mm concrete surface bed 250 micron dpm
- Compacted & graded ground fill in layers or 150mm max
- Brickwork reinforcement: in end walling is built to 1.5m height max
- Concrete strip foundation to comply with SABS 0400

**SCALE 1:10**

**7.3 - Internal footing (75mm - 1000mm in height)**

- NFP bricks mortar mix class II sand/cement
- 25mm floor screed
- 75mm concrete surface bed
- 250 micron dpm folded up
- Graded & compacted ground fill in layers of 150mm max
- 2 leaf foundation wall
- 200 x 600mm concrete foundation

**SCALE 1:10**
7.4 - Internal footing (300mm in height)

7.5 - New wall joined to an existing wall
7.6 - Internal footing (thickened surface bed foundation)

7.7 - Typical detail of a hardwood window (sill level in a brick wall)
7.8 - Facebrick externally with quarry tile sill for brick wall

7.9 - Facebrick externally with timber window frame and quarry tile sill for cavity wall
7.10 - Facebrick externally steel window frame and quarry tile sill for cavity wall

7.11 - External brick wall with quarry tile window sill (hardwood window)
7.12 - External facebrick wall with quarry tile window sill (steel window)

7.13 - Facebrick with bullnose sill externally for brick wall (steel window)
7.14 - Facebrick with bullnose sill externally for cavity wall (steel window)

7.15 - Steel window with plaster external sill in brick wall
7.16 - Facebrick with brick sill externally for cavity wall Sliding aluminium window

7.17 - External cavity wall construction at junction with R.C. balcony slab
7.18 - Typical R.C column / brick cavity wall junction with vertical joints

Note:
If this is an external wall, provision must be made for movement joint (12mm bitumen impregnated softboard)

7.19 - Section of brick wall joined to concrete column
7.20 - Placement of DPC in two leaf brick wall

FBS, FBX or FBA bricks
DPC must project to face of facebrick
DPC to be laid directly on brickwork

Plaster NFP bricks
DPC must project to face of facebrick
Crack will develop in line with DPC

INCORRECT

Plaster NFP bricks
DPC should not project to face of plaster
FBA, FBS or FBX bricks

INCORRECT

Plaster
DPC to end flush with brickwork face
FBA, FBS or FBX bricks

INCORRECT

FBS, FBX or FBA bricks
DPC must project to face of facebrick
DPC must be sandwiched between 2 layers of mortar

Plaster NFP bricks
Horizontal v-joint in plaster (no sealant needed)

CORRECT

CORRECT

SCALE 1:10
7.21 - Brick lintel for facebrick external wall (steel window)

Concrete roof tiles roof pitch min 17.5 degrees
4mm diam double strand galvanised roof anchor built in min 300mm
Minimum 4 brick courses above opening brick lintel FBA, FBS or FBX bricks
Polysulphide sealant
NFP bricks
R8 rod reinforcement end brick course
1 coat cement plaster
Steel window frame

7.22 - Brick lintel for an external plaster finished brick wall

EXTERIOR
NFP bricks
Polysulphide sealant
Keyed drip
SCALE 1:10
INTERIOR
Minimum 4 brick courses above opening
R8 rod reinforcement every brick course above opening
One coat cement plaster
NFP bricks
Steel window frame
7.23 - Brick lintel for an external facebrick wall

7.24 - Brick lintel for an external cavity wall
7.25 - Brick on edge (soldier course) lintel for cavity wall

"EXTERIOR"

R8 rod reinforcement on every brick course above lintel
Steel hangers built into brickwork above cavity above lintel to be filled with grout / mortar
Brick on edge / soldier course brick lintel
Polysulphide sealant
FBA, FBS or FBX bricks

"INTERIOR"

250 micron dpc minimum 4 brick courses above opening
1 coat cement plaster
Reinforced concrete lintel to engineers specifications
NFP bricks
Steel window frame

SCALE 1:10

Note: This detail is suitable for a multi-story building where there is no protection from rain to the area above the window

7.26 - Brick lintel for facebrick external wall (steel window)
7.27 - Brick lintel for facebrick external wall (steel window)

7.28 - Double precast concrete lintel for plastered external brick wall (aluminium window)
7.29 - Typical R.C column / brick cavity wall junction with vertical joints

7.30 - Brick on edge lintel for facebrick external wall (steel window)