3 ACCESSORIES

3.1 GENERAL DESCRIPTION

3.1.1 Scope

1 This Part specifies anchor and tie system, joint control, reinforcement and lintels associated with masonry works.

2 Related Parts and Sections are as follows:

This Section	
Part 1	General
Part 5	Masonry Laying
Section 1	General
Section 6	Concrete

3.1.2 References

1 The following standards are referred to in this Part:

ASTM C1623 .....Standard Specification for Manufactured Concrete Masonry Lintels

EN 845-1 .....Specification for ancillary components for masonry. Ties, tension straps, hangers and brackets

EN 845-2 .....Specification for ancillary components for masonry. Lintels

EN 845-3 .....Specification for ancillary components for masonry. Bed joint reinforcement of steel meshwork

EN 10346 .....Continuously hot-dip coated steel flat products. Technical delivery conditions

EN 10143 .....Continuously hot-dip coated steel sheet and strip. Tolerances on dimensions and shape

EN 13658 .....Metal lath and beads. Definitions, requirements and test methods.

ISO 4998 .....Continuous hot-dip zinc-coated carbon steel sheet of structural quality

ISO 14657 .....Zinc-coated steel for the reinforcement of concrete

3.2 ANCHOR AND TIE SYSTEMS

3.2.1 Cavity Wall Ties

1 Cavity wall ties to comply with EN 845-1 and be of one of the following types as directed by the Engineer or as noted in the Project Documentation:

(a) Butterfly wall tie fabricated from stainless steel wire

(b) Double triangle wall tie fabricated from stainless steel wire

(c) Vertical-twist tie fabricated from stainless steel strip.

2 Ties fabricated from wire are not be used for cavities exceeding 75 mm.

3 All connections between masonry walls or partitions and concrete columns or walls shall be made using propriety stainless steel ties secured to stainless steel fixing channels embedded in the concrete.

3.3 CONTROL JOINTS

3.3.1 Movement Joints

1 Movement joints to be 12 mm wide and formed where indicated or where continuous runs of block walling exceed 8 metres in length.

2 The joints are to be straight and vertically formed with uncut faces of the blocks to each side and filled with an approved compressible material manufactured specifically for building into movement joints.

3 External joints are to be sealed with a mastic compatible with the joint filling material when the block walling is thoroughly dry and the joint surfaces have been cleaned with a wire brush or mechanical tool.

4 A primer is to be applied to the joint surface if specified by the manufacturer of the mastic.

5 Mastic sealing to unfilled movement joints to be on an approved foam backing strip placed to ensure the correct depth of sealant.

3.4 JOINT REINFORCEMENT

3.4.1 Reinforcement for Concrete Block Masonry

1 Expanded mesh lath reinforcement is to be fabricated from minimum nominal thickness 0.3 mm as per EN 13658-2, or welded wire lath or mesh with a minimum weight of 0.87 kg/m² as per EN 13658-2; or Zinc coated steel with one of the surface quality Types "B" or “C” with minimum zinc coating - 225 g/m² as per EN 10346, as directed by the Engineer or Project Documentation.

2 The widths of reinforcement for various wall thicknesses to comply with Table 3.1.

Table 3.1
Expanded Steel Mesh Joint Reinforcement Widths

Block Thickness (mm)	Reinforcement Width (mm)
100	50
150	60
200	110

3.5 LINTELS

3.5.1 Precast or Cast In-situ Lintels

1 Precast or cast in-situ lintels to be manufactured in accordance with the relevant provisions of Section 5, and the adopted standards.

2 An open joint not less than 12 mm are to be left between the ends of precast or cast in-situ concrete lintels and the blocks adjacent to these ends. These open joints should be left as long as possible during construction and not be filled in until plastering or other works necessitate such filling.

3 Lintels are to have a minimum end bearing of 200 mm.

3.5.2 Lightweight Lintels:

1 If thermal or lightweight blocks are used in the construction, then the engineer may ask for using of lightweight lintels with density less than 1400kglm^3 according to the relevant EN or ASTM standards.

END OF PART