

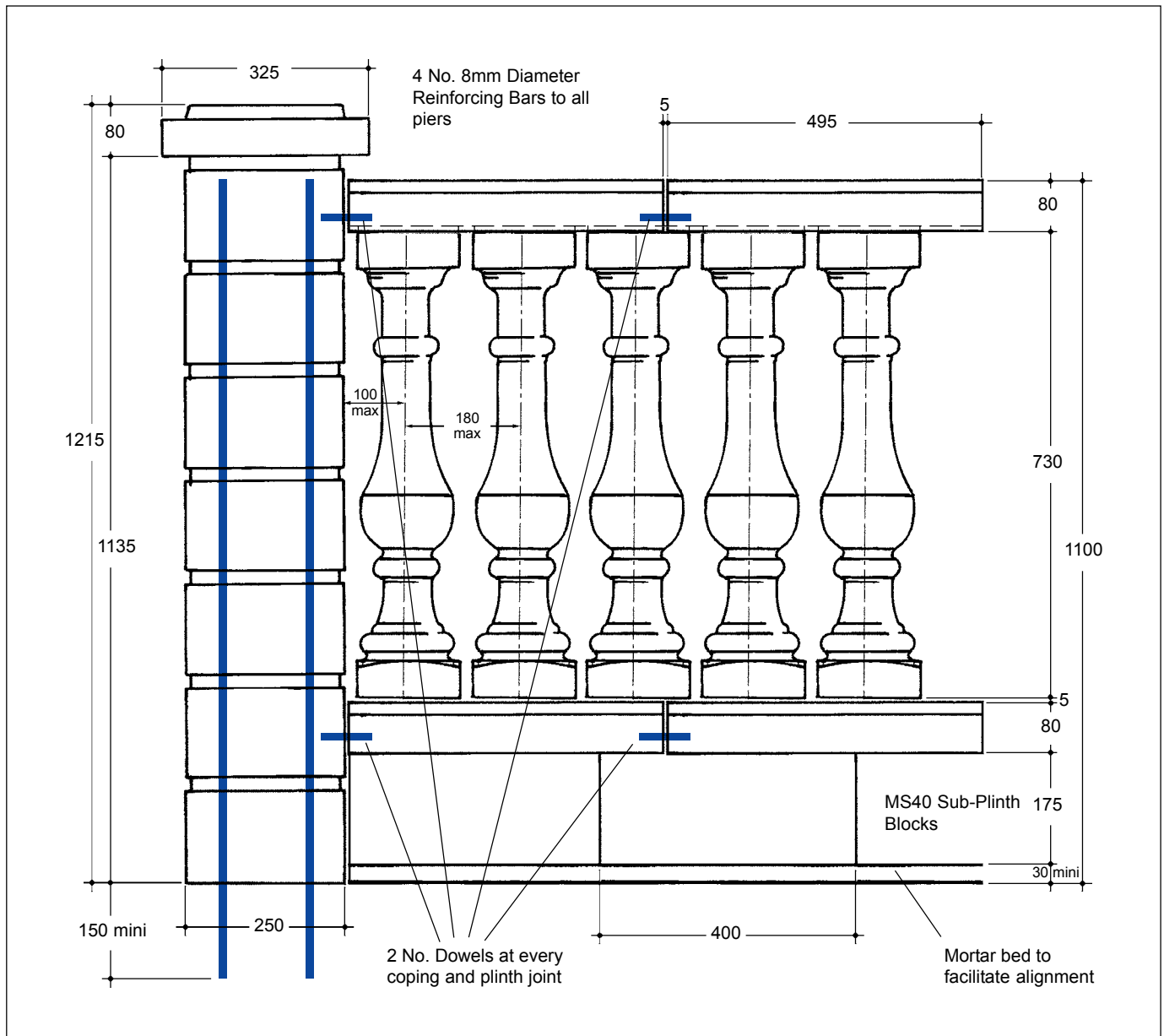
Atlantic Balustrades



LAYING INSTRUCTIONS

Atlantic Balustrade has been designed as an elegant ornamental stonework that is easy to erect. This balustrade system can either be used as a guardrail or simply for decorative purposes. However, it should be noted that where the product is used for guardrail purposes specific heights and baluster spacings must be adhered to in order to comply with current building regulations.

The drawing below shows the setting out detail for Atlantic Balustrade when used in areas subject to building regulations. (Where building regs compliance is **not** required the balusters are generally set at 250mm centres and the overall finished height may be reduced from 1100mm by omission of the MS40 sub-plinth).



For stability the balustrade must be laid on a solid base e.g. frost protected foundation or reinforced concrete terrace. In all cases, four 8mm dia. steel reinforcing bars must be securely anchored into the base and used to reinforce the pillars. These bars should be fixed into the foundations a minimum of 150mm, but since all projects vary you must seek approval from your structural engineer. Your engineer normally also specify a requirement for weep holes requirements in the mortar bed. For strength and stability, pillars must **not** be laid more than 3m apart.

For best results when jointing the components use Weser-Mix JM mortar which has been specially developed for laying balustrades. This fixing mortar is available in 15kg buckets, colour-matched to the balustrade components. Usage is generally 5 kg per metre of balustrade length.

Lay the elements very carefully to avoid staining them. It is recommended that masking tape be used to protect edges from excess mortar during jointing. All elements such as balusters, copings and plinths are fixed together with a 5mm joint of Weser-Mix JM mortar. Do not remove the excess of mortar immediately. After the mortar has just become dry, scrape off the excess of mortar with the edge of a pointing trowel.

GENERAL ORDER OF LAYING

- 1** Anchor the 8 mm dia. steel reinforcing bars into the foundation or floor slab.
Lay the pillar blocks and fill them with concrete.
Fix the pier cap on a thin layer of traditional mortar.
- 2** Plinth must be laid on a layer of traditional mortar (minimum thickness 20mm)
Cut the plinths to length using stone cutting discs. Allow 5mm joints between elements.
Fix pairs of dowels in the holes to the ends of these elements using Weser-Mix JM mortar.
Drill holes to piers and into ends of trimmed coping/plinths as necessary.
Press a layer of Weser-Mix mortar between the elements to obtain a 5mm joint.
- 2a** When a height of 1100mm is required for safety regulations, lay MS40 sub-plinth blocks and fill them with concrete for rigidity. Copings are then laid on top of this base course (see drawing).
- 3** Arrange balusters on plinths at correct spacing (see drawing) and bed them on 5mm Weser-Mix mortar.
- 4** Lay copings on top of the balusters, again on 5 mm of Weser-Mix mortar. Fix dowels (again in pairs) at the ends of these elements. Drill holes where necessary, in particular to the piers in order to connect copings to the piers. Furthermore, any copings trimmed to length must have dowel holes re-drilled to provide continuity of the fixing detail.



STAIR LAYOUTS

Stair Layouts with ramp balustrading vary widely from one project to the next and you must:

- either take very careful measurements beforehand and draw up a detailed layout plan
- or lay the main elements dry to determine the exact position of each baluster on the steps or stringer.

To make laying balusters easier on staircase stringers, Weser can supply cubes which must be cut to suit the slope of the stringer. Bend the link pins if necessary.

Our products are mass-treated with water-repellent, so they are frost protected. To avoid subsequent weathering, we recommend the use of Weser-Pro HY to protect the balustrades