



Design Guidance / Site Works

Arrow Freestanding Precast Concrete Wall Panels

Panel Support

- Units are designed to be supported on a full structural floor slab designed to suit the wall line load.
- The support area must be designed to carry the full line load of the wall panels without settlement and must be a smooth flat surface.

Top Line of wall

Any variation in finished floor level will produce a variable top line to the wall. Where a consistent top line of panels is required, we recommend a capping channel be applied to the wall after installation.

Vertical Joints

- Panel edges are cast with a tongue & groove joint detail in the base, the panel stem has a plain edge.
- Variation in the level of the floor slab and the cross section of the precast units will result in a joint variation. This may occur joint to joint or within any individual vertical joint.
- For permanent walls mastic sealant, if included, applied to the joint is designed to accommodate these variations.
- FOR FIREWALLS ONLY - Intumescent mastic sealant applied to the joint is designed to accommodate these variations.

Erection Systems

- Panels are erected using either a RD30 wire loop lifter or RD30 Rotating Eye lifter located in cast inserts or directly from the fork tines of a suitable telehandler (2.4m & 3m panels only)
- Erection inserts may require cleaning prior to attaching lifting loops/ rotating eye lifter.

DISCLAIMER

Please note that any information provided is to be used as a guide only. Any lifting/handling operations should be carried out by trained and competent personnel only. ACP Concrete Limited will not be held responsible for any damage or injuries in connection with handling or installation not carried out by ACP (Concrete) Limited.

Joint Sealant (one side or both sides)

- For permanent installations the joint between the panels can be effectively sealed with a one-part polyurethane mastic sealant (where included in our quotation).
- Sealant is gunned into the vertical joints and tooled into the chamfered "V" shaped joint. The 'V' joint is not designed to be full filled with sealant
- Sealant is supplied to provide a moisture and dust barrier and is not designed to produce an aesthetic jointing detail.

Some curling of sealant edges may be expected during curing.

- FOR FIREWALLS ONLY - Intumescent mastic sealant is required. (where included in the quotation).

Fixing to Base Slab

- It is usual for units to sit directly onto the floor slab. Some sliding may occur if the units are not connected to the slab. Dowel bars or concrete anchors can be supplied for each unit.
- Dowel bar fixing - Holes to base slab must be drilled and treated in accordance with grout manufactures requirements and bars are to be inserted through cast holes in panel base.
- Concrete anchor fixing - drill holes into foundation / floor slab concrete through the preformed holes in the panel toe. Insert concrete anchors & tighten to recommended torque setting as detailed on fixing guidance notes (supplied with bolts).

Damage

- It is highly likely that precast units will suffer small chips and superficial damage to unit surface. This damage should not compromise the unit's structural integrity.
- Any areas should be repaired with a high strength mortar.
- Colour matching of suitable repair mortar and the precast unit is not possible due to high strength requirements of the repair.