

Isocrete 1500

DESCRIPTION

A single component, quick hardening cement based screed for levelling floors where rapid drying is essential. Isocrete 1500 can be hand applied by trowel (0 - 20 mm) or can be pumped (4 - 20 mm). For pumped application, at least 8 mm average thickness would be a typical expectation on a reasonably level base.

USES

For Fast Track refurbishment and new construction where finishes such as carpets, ceramic tiles, vinyl, linoleum wood block or cork need to be applied quickly. Used for smoothing floors in office buildings, dwellings, public buildings, schools, hospitals and other places exposed to similar loads.

May be used as a screed to receive an epoxy resin finish in areas taking light traffic. For a flowing screed for industrial use or to receive a polyurethane resin finish, use Flowscreed Industrial Top from Flowcrete Specialist Flooring Ltd.

BENEFITS

- ☺ Quick drying.
- ☺ Self levelling.
- ☺ Can pump up to 2,000m² per day, under suitable conditions.
- ☺ Walk on after 2 to 4 hours under normal conditions.
- ☺ Normally cover after 24 hours at screed thicknesses up to 10 mm.
- ☺ Pumpable or hand laid.
- ☺ Single pack.
- ☺ Protein free, will not harbour bacteria.

PROJECT REFERENCES

Heathrow Airport, PC World, Curry, Dixons, BHS, Marks & Spencer, Trocadero Centre, St James Hospital, Hereford County Hospital.

MODEL SPECIFICATION FOR ISOCRETE 1500

Isocrete 1500 to be supplied and laid on a suitable sound and vacuum cleaned concrete or screed base primed with Isocrete Primer.

Minimum thickness feather edge by hand or 4 mm by pump and maximum thickness 20 mm.

To be mixed and laid in accordance with the instructions of Isocrete Commercial Flooring.

TYPICAL PHYSICAL PROPERTIES

<i>Compressive strength (28 days):</i>	33 N/mm ²
<i>Flexural strength:</i>	9 N/mm ²
<i>Adhesion to C30 concrete (28 days):</i>	>1 N/mm ²
<i>Maximum particle size:</i>	0.5 mm
<i>Protein content:</i>	Nil
<i>Thickness</i>	<i>pumped:</i> 4 - 20 mm <i>hand applied:</i> 0 - 20 mm
<i>Laying temperature:</i>	5 - 25 °C
<i>Walk on time:</i>	2 - 4 hours at 20 °C
<i>Overcoating time</i> <i>(20°C, 50% RH) 10mm thick :</i>	24 hours <i>(dependent upon thickness, ambient conditions & substrate condition)</i>
<i>Flow Ring</i> <i>(65 mm diam x 40 mm high):</i>	Target 230-250 mm

SURFACE PREPARATION

The subfloor is to be solid and thoroughly cleaned concrete or screed. To ensure a high degree of bond in heavily trafficked areas, use enclosed shotblasting or scabbling. All residues must be removed including vacuum cleaning to provide a dry, dust free open textured surface free from excessive laitance, old adhesives and other contamination.

All openings and holes in the floor to be sealed to prevent leaks.

TEMPERATURE & RELATIVE HUMIDITY

Internal air and floor temperatures must exceed +5 °C. The RH of the concrete floor must not exceed 95%, but where floor finishes are to be laid soon after Isocrete 1500 application, the RH of the base must be below 75% as per BS8203.

If above 75% RH, use Isocrete Aqualock damp proof membrane between the concrete and Isocrete 1500 to enable immediate installation of floor finishes.

BONDING AND PRIMING

Concrete floors of normal porosity are to be primed with Isocrete Primer, diluted 1 part primer to 5 parts water. Brush the primer out over the floor and leave to dry before applying the Isocrete 1500.

Priming improves the adhesion of the Isocrete 1500 to concrete, prevents formation of air bubbles and reduces water absorption into the subfloor.

For detailed information on priming, including how to prepare porous bases, impermeable concrete bases or bases other than concrete floors, refer to our Isocrete Primer data sheet or contact our technical service department.

MIXING

By heavy duty electric drill and helical mixer (minimum mix time 60 seconds), or continuous mixer/pump unit using clean drinking water at typically 4.5 to 5 litres per 25 kg bag. The water content is to be regularly checked by the flow ring test and adjusted accordingly.

When mixing by hand, do not mix more compound than can be applied in 20 minutes.

Excess water may lead to a friable surface and will reduce the strength of the underlayment.

Working temperature of the mix must be in the range 5 to 25°C. Use warm water in cold conditions.

APPLICATION

Pour or pump the mix over the floor surface. For pumped application, ensure the continuity of electricity and water supplies is secured. Pump the Isocrete 1500 onto the floor in a continuous operation, feeding fresh material into a wet edge.

Isocrete 1500 will level out to a smooth even finish. Where necessary, release small air bubbles from the screed with a trowel, spiked roller or tee-bar. This practice must be adopted within 5 minutes of application to avoid interfering with final levelling properties.

PROTECTION ON COMPLETION

Ensure the screed is not subjected to draughts during the first 6 hours of curing as this may lead to cracking and crazing.

Tape up doorways with polythene if necessary to prevent air movement during application. Subsequently ensure the room has sufficient ventilation to allow the screed to dry.

Ensure adequate protection from other trades and traffic after installation. Prevent contamination by following trades e.g. plastering, including water contact.

HARDENING AND DRYING TIMES

The Isocrete 1500 may be walked on after 2 - 4 hours, and may be sanded, if required, 24 hours after application.

The floor finish can be installed after 12 to 24 hours, depending on the type of finish, thickness of Isocrete 1500, substrate and ambient conditions.

Before installation of floor coverings, the requirements for critical moisture contents for particular floor coverings have to be observed.

PACKAGING

Available in nominal 25 kg bags.

COVERAGE

6.8 kg/m² at 4 mm
17 kg/m² at 10 mm
25.5 kg/m² at 15 mm
34 kg/m² at 20 mm

STORAGE & SHELF LIFE

Stored unopened in dry conditions, shelf life will be 6 months.

HEALTH & SAFETY

Some of the components of this product may be hazardous during mixing and application. Please consult the relevant Health & Safety Data Sheets.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

Isocrete have a wealth of technical & practical experience built up over many years in our pursuit of excellence in flooring and concrete technology. Clients are welcome to call our Technical Desk or visit our Technology Centre in Sandbach.

IMPORTANT NOTE

Isocrete's products are guaranteed against defective materials and manufacture & are sold subject to its standard Terms & Conditions of Sale, copies of which may be obtained on request. Whilst Isocrete endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, it cannot - because it has no direct or continuous control over where or how its products are applied - accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendations or information given by it.

1500 15-05-02 JC

**Isocrete Commercial Flooring
The Flooring Technology Centre
Booth Lane
Sandbach
Cheshire
CW11 3QF
Tel: +44 (0) 1270 753753
Fax: +44 (0) 1270 753333**