



FORMIX

Concrete Mixtures

FORMFLOW-S

Standard Set Plasticiser

The addition of **FORMFLOW-S** to an existing concrete mix facilitates up to 25% reduction in added water content for a given slump with the resultant marked reduction in water/cement ratio providing increased strengths. Alternatively it will increase slump by up to 150% without any increase in water content. **FORMFLOW-S** is therefore used to:

- Increase strengths without loss of workability
- or, improve workability without an increase in water/cement ratio.
- or, maintain specified strength with reduced cement content

The inclusion of **FORMFLOW-S** in a well designed concrete mix will also provide:

- Easier and speedier placing and compaction
- Increased density and impermeability
- Reduced shrinkage and minimal cracking
- Superior finish.
- Minimal segregation and bleeding

Use

100-140ml **FORMFLOW-S** to 50 kilos Portland cement, added to the gauging water or pre-wetted mix. Suitable for use with all types of Portland cement.

Composition

A concentrated aqueous solution of lignin based water reducing agent containing no chlorides or nitrates.

Cement Economy

A concrete mix, designed to provide a specific compressive strength might be substantially reduced in cost by

- 1 Reduce weight of cement by 10 - 15%
- 2 Increase weight of fine aggregate by 25% of the weight saved in cement
- 3 Increase weight of large aggregate by 50% of the weight saved in cement
- 4 Reduce total water by up to 20% to give equal workability
- 5 Add **FORMFLOW-S** at rate of 140 ml to 50 kilo cement

A typical example of the use of this method is as follows:

	Existing Mix	Redesigned Mix
Cement	300 kg	255 kg
Fine Aggregate	505 kg	516 kg
Coarse Aggregate	875 kg	897 kg
Water (total)	155 kg	125 kg
Water/Cement Ratio	0.52	0.49
ADOFLOW-S	None	714 ml
Aggregate/Cement Ratio	4.6 : 1	5.5 : 1

The redesigned mix will show a considerable saving in cost of cement with no loss of strength or yield.

formworkdirect.co.uk
 TEL:
 (+44) (0)151 532 0179
 EMAIL
 sales@formworkdirect.co.uk



formworkdirectmalta.com
 TEL:
 +356 2124 4241
 EMAIL
 formworkdirect@polidano-group.com



FORMIX

Concrete Mixtures

Specification Clause

FORMFLOW-S Standard Setting Plasticiser manufactured by **Formwork Direct International** limited, shall be added to the concrete mix in accordance with the manufacturers recommendations.

Storage

Protect from freezing. In the event of freezing, material should be completely thawed and then thoroughly mixed before use.

Health & Safety

FORMFLOW-S is non toxic and non-flammable. Any splashes should be washed with water, if contact with eyes occurs wash thoroughly with water. If irritation persists seek medical advice.

Refer to separate **FORMFLOW-S** Health and Safety leaflet.

formworkdirect.co.uk
TEL:
(+44) (0)151 532 0179
EMAIL
sales@formworkdirect.co.uk



formworkdirectmalta.com
TEL:
+356 2124 4241
EMAIL
formworkdirect@polidano-group.com