

Dramix®

Our recommendations, from handling to pumping

Stacking of units

Safety precautions

Transport

- By truck: no stacking allowed
- By container: allowed with precautions*

Warehouse storage

- Racks: no stacking allowed
- Floor: allowed with precautions*

* Precautions: obtain stability of the upper unit (e.g. put wooden plate in between)

Handling



Before adding fibres

Maximum dosage depends on:

- Concrete composition
- Placing method
- Type of application

Bekaert recommendations:

- Preferably use a central batching plant mixer
- A continuous grading and sieve curve
- Sufficient fines and mortar content

Note:

- Depending on dosage and fibre type, fibres reduce the slump
- Adjust required consistency preferably with mid-range or high-range water reducers
- If you plan to work with glued fibres, stored in $< 6^{\circ} \text{C}$, in combination with automatic dosing systems, please contact our organization beforehand.

Dosing

Plant mixers

- Introduce fibres together with sand and aggregates, OR: Add fibres to fresh mixed concrete
- Never add fibres as a first component

Truck mixers

- Add fibres continuously at a maximum of 40 kg/min
- Never add fibres as a first component
- Never fill drum completely with concrete in order to achieve even fibre distribution

Mixing

Mixing time depends on the efficiency of the mixing equipment

- Run maximum drum rotation during the addition of fibres.
- After addition of fibres, continue mixing the concrete for 1 min./m³ with a minimum of 5 minutes.

Quality control

Before using fibre concrete, a preliminary test must be done

- Workability
- Air content
- Separation of fibre bundles when using glued fibres
- Homogenous fibre distribution in the concrete

Pumping

Hose diameter $> 80 \text{ mm}$
Place the shute min. 35 cm above the concrete pump hopper grill.

For complicated pump lines or concrete compositions, a trial is recommended prior to execution



Dramix® OL Types

Our recommendations, from handling to pumping

Stacking of units

Safety precautions

Transport

- By truck: no stacking allowed
- By container: allowed with precautions*

Warehouse storage

- Racks: no stacking allowed
- Floor: allowed with precautions*

*Precautions: obtain stability of the upper unit (e.g. put wooden plate in between)

Handling



Gloves made from thick leather/hard rubber

Before adding fibres

Maximum dosage depends on:

- Concrete composition
- OL type

Bekaert recommends:

- Only use a central batching plant mixer
- A continuous grading and sieve curve

Note:

- High dosage OL types can reduce the slump heavily
- Adjust required consistency preferably with water reducing or high water reducing agents

Dosing

Plant mixers

- Add fibres to fresh mixed concrete
- Never introduce fibres with sand and aggregates
- Never add fibres as a first component
- Speed: 80 kg/min when using a conveyor belt
- Speed: 80 kg/min when using an automatic dosing system

Truck mixers

Never dose OL fibres in the truckmixer

Mixing

Mixing time depends on the efficiency of the mixing equipment

Never dose OL fibres in the truckmixer

Quality control

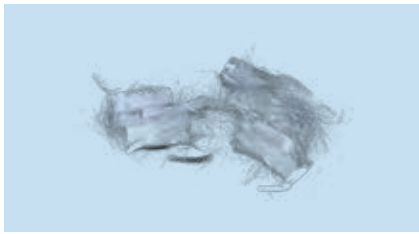
Before using fibre concrete, a preliminary test must be done

- Workability
- Air content
- Homogenous fibre distribution in the concrete

Pumping

Hose diameter > 80 mm

For complicated pump lines or concrete compositions, a trial is recommended prior to execution



Duomix®

Our recommendations, from handling to pumping

Handling



Before adding fibres

Bekaert recommends:

- Use of central batching plant mixer is preferred
- A continuous grading and sieve curve
- Sufficient fines and mortar content

Note:

- A high dosage of Duomix® will reduce the slump
- Add water reducing agents (superplasticizers) to adjust the slump to meet the requirements
- Conducting a pre-construction material compliance test is advised

Dosing

Plant mixers

- Introduce fibres with sand and aggregates
- Add fibres to fresh mixed concrete

Truck mixers

- We recommend not adding the fibres in a drum filled completely with concrete in order to achieve even fibre distribution
- Speed: add fibres continuously at a maximum of 5 kg/min

Mixing

Mixing time depends on the efficiency of the mixing equipment

Run maximum drum rotation during the addition of fibres.

Quality control

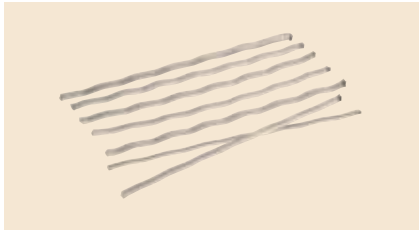
Before using fibre concrete, a preliminary test must be done

- Workability
- Air content
- Dramix® Duo: Ensure separation of steel fibre bundles

Pumping

Hose diameter > 80 mm

For complicated pump lines or concrete compositions, a trial is recommended prior to execution



Synmix®

Our recommendations, from handling to pumping

Handling



Before adding fibres

Bekaert recommends:

- Preferably use a central batching plant mixer
- A continuous grading and sieve curve
- Sufficient fines and mortar content
- Optimum slump before fibre addition > 12 cm

Note:

- Depending on dosage and fibre type, fibres reduce the slump
- Adjust required consistency preferably with water reducing or high water reducing agents

Dosing

Plant mixers

- Introduce fibres with sand and aggregates
- Add fibres to fresh mixed concrete
- Never add fibres as a first component

Truck mixers

- Never add fibres as a first component
- Never fill drum completely with concrete in order to achieve even fibre distribution
- Speed: add fibres continuously at a maximum of 5 kg/min

Mixing

Mixing time depends on the efficiency of the mixing equipment

- Drum rotation speed > 12 rpm
- After addition of fibres, continue mixing the concrete for 1 min./m³ with a minimum of 5 minutes.

Quality control

Before using fibre concrete, a preliminary test must be done

- Workability
- Air content
- Homogenous fibre distribution in the concrete

Pumping

Hose diameter > 80 mm

For complicated pump lines or concrete compositions, a trial is recommended prior to execution