# **Dramix**<sup>®</sup>



better together

### Dramix<sup>®</sup> BOOSTER:



#### Dramix<sup>®</sup> TANKER:



- Exact dosing of the Dramix<sup>®</sup> steel fibers
- Reduces the workload at the plant
- Increases the occupational safety and flexibility
- Minimizes your waste
- Your tailor-made solution
- Just-in-time deliveries
- Exact dosing of the Dramix® steel fibers
- Increased productivity
- Increases the occupational safety
- Bulk deliveries up to 1100kg (2,425 lb)
- Dramix<sup>®</sup> TANKER 1100: removable tray
- Dramix® TANKER 1500: dosing speed of 150kg/min (330 lb/min)

#### Other Bekaert building products

- Murfor<sup>®</sup> masonry reinforcement
- Stucanet<sup>®</sup> plastering mesh
- Widra<sup>®</sup> corner beads
- Mesh Track road reinforcement





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#### Recommendations for handling, dosing and mixing



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## **BEKAERT**

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		Dramix®	Dramix <sup>®</sup> Easy Dose	Dramix <sup>®</sup> OL Types	Duomix®	Synmix®
HANDLING		- Gloves and eye protection must be used! - Keep dry	- Gloves and eye protection must be used! - Keep dry	- Gloves and eye protection must be used! - Keep dry	- Gloves and eye protection must be used! - Keep dry	- Gloves and eye protection must be used! - Keep dry
BEFORE ADDING FIBERS		<ul> <li>Maximum dosage depends on: <ul> <li>Concrete composition</li> <li>Placing method</li> <li>Type of application</li> </ul> </li> <li>Bekaert recommendations: <ul> <li>Preferably use a central batching plant mixer</li> <li>A continuous grading and sieve curve</li> <li>Sufficient fines and mortar content</li> <li>Optimum slump before fiber addition &gt; 5 in Note: <ul> <li>Depending on dosage and fiber type, fibers reduce the slump</li> <li>Adjust required consistency preferably with water reducing or high water reducing agents</li> </ul> </li> </ul></li></ul>	<ul> <li>Maximum dosage depends on: <ul> <li>Concrete composition</li> <li>Placing method</li> <li>Type of application</li> </ul> </li> <li>Bekaert recommendations: <ul> <li>Preferably use a central batching plant mixer</li> <li>A continuous grading and sieve curve</li> <li>Sufficient fines and mortar content</li> <li>Optimum slump before fiber addition &gt; 5 in Note: <ul> <li>Depending on dosage and fiber type, fibers reduce the slump</li> <li>Adjust required consistency preferably with water reducing or high water reducing agents</li> </ul> </li> </ul></li></ul>	<ul> <li>Maximum dosage depends on: <ul> <li>Concrete composition</li> <li>OL type</li> </ul> </li> <li>Bekaert recommends: <ul> <li>Only use a central batching plant mixer</li> <li>A continuous grading and sieve curve</li> <li>Sufficient fines and mortar content</li> </ul> </li> <li>Note: <ul> <li>High dosage OL types can reduce the slump</li> <li>Adjust required consistency preferably with water reducing or high water reducing agents</li> </ul> </li> </ul>	<ul> <li>Bekaert recommends:</li> <li>Preferably use a central batching plant mixer</li> <li>A continuous grading and sieve curve</li> <li>Sufficient fines and mortar content</li> <li>Optimum slump before fiber addition &gt; 5 in Note:</li> <li>Depending on dosage and fiber type, fibers reduce the slump</li> <li>Adjust required consistency preferably with water reducing or high water reducing agents</li> </ul>	<ul> <li>Bekaert recommends:</li> <li>Preferably use a central batching plant mixer</li> <li>A continuous grading and sieve curve</li> <li>Sufficient fines and mortar content</li> <li>Optimum slump before fiber addition &gt; 5 in Note:</li> <li>Depending on dosage and fiber type, fibers reduce the slump</li> <li>Adjust required consistency preferably with water reducing or high water reducing agents</li> </ul>
DOSING Plant mixer	The second sec	<ul> <li>Introduce fibers with sand and aggregates</li> <li>Add fibers to fresh mixed concrete</li> <li>Never add fibers as a first component</li> </ul>	<ul> <li>Introduce fibers with sand and aggregates</li> <li>Add fibers to fresh mixed concrete</li> <li>Never add fibers as a first component</li> </ul>	<ul> <li>Never introduce fibers with sand and aggregates</li> <li>Add fibers to fresh mixed concrete</li> <li>Never add fibers as a first component</li> <li>Speed: 10kg/min (22 lb/min) when using a conveyer belt</li> <li>Speed: 20 kg/min (44 lb/min) when using a automatic dosing system</li> </ul>	<ul> <li>Introduce fibers with sand and aggregates</li> <li>Add fibers to fresh mixed concrete</li> <li>Never add fibers as a first component</li> </ul>	Introduce fibers with sand and aggregates Add fibers to fresh mixed concrete Never add fibers as a first component
Truck mixer		<ul> <li>Never add fibers as a first component</li> <li>Never fill drum completely with concrete in order to achieve even fiber distribution</li> <li>Add fibers continuously at a maximum of 40 kg/min (88 lb/min)</li> <li>Test blower/blast equipment prior to use with Dramix® steel fibers (this equipment is not needed with Dramix® fibers).</li> </ul>	<ul> <li>Never add fibers as a first component</li> <li>Never fill drum completely with concrete in order to achieve even fiber distribution</li> <li>Speed: Dramix<sup>®</sup> Easy Dose fibers (RB types) can be dosed continuously at a maximum of 60 kg/min (132 lb/min)</li> </ul>	<b>NEVER:</b> dose OL fibers in the truckmixer	<ul> <li>Never add fibers as a first component</li> <li>Never fill drum completely with concrete in order to achieve even fiber distribution</li> <li>Speed: add fibers continuously at a maximum of 5 kg/min (11 lb/min)</li> </ul>	<ul> <li>Never add fibers as a first component</li> <li>Never fill drum completely with concrete in order to achieve even fiber distribution</li> <li>Speed: add fibers continuously at a maximum of 5 kg/min (11 lb/min)</li> </ul>
	(5 min,	Mixing time depends on the efficiency of the mixing equipment Drum rotation speed > 12 rpm - Mixing time: after adding all fibers, mix	Mixing time depends on the efficiency of the mixing equipment Drum rotation speed > 12 rpm - Mixing time: after adding all fibers, mix	 Mixing time depends on the efficiency of the mixing equipment <b>NEVER:</b> dose OL fibers in the truckmixer	<ul> <li>Mixing time depends on the efficiency of the mixing equipment</li> <li>Drum rotation speed &gt; 12 rpm</li> <li>Mixing time: after adding all fibers, mix</li> </ul>	<ul> <li>Mixing time depends on the efficiency of the mixing equipment</li> <li>Drum rotation speed &gt; 12 rpm</li> <li>Mixing time: after adding all fibers, mix</li> </ul>
QUALITY CONTROL		<ul> <li>1.3 minute/yd3 concrete but not less than 5 min</li> <li>Before using fiber concrete, a preliminary test must be done</li> <li>Workability</li> <li>Air content</li> <li>Separation of fiber bundles when using glued fibers</li> <li>Homogenious fiber distribution in the concrete</li> </ul>	<ul> <li>1.3 minute/yd3 concrete but not less than 5 min</li> <li>Before using fiber concrete, a preliminary test must be done</li> <li>Workability</li> <li>Air content</li> <li>Homogenious fiber distribution in the concrete</li> </ul>	<ul> <li>Before using fiber concrete, a preliminary test must be done</li> <li>Workability</li> <li>Air content</li> <li>Homogenious fiber distribution in the concrete</li> </ul>	<ul> <li>1.3 minute/yd3 concrete but not less than 5 min</li> <li>Before using fiber concrete, a preliminary test must be done</li> <li>Workability</li> <li>Air content</li> <li>Dramix® Duo: Ensure separation of steel fiber bundles</li> <li>Homogenious fiber distribution in concrete</li> </ul>	1.3 minute/yd3 concrete but not less than 5 min         Image: A state of the
PUMPING		Hose diameter > 1.5 x fiber length For complicated pump lines or concrete compositions, a trial is recommended prior to execution	Hose diameter > 1.5 x fiber length For complicated pump lines or concrete compositions, a trial is recommended prior to execution	Special pump test program is required	Hose diameter > 1.5 x fiber length For complicated pump lines or concrete compositions, a trial is recommended prior to execution	Hose diameter > 1.5 x fiber length For complicated pump lines or concrete compositions, a trial is recommended prior to execution

Bekaert is provided to support you for all questions regarding the dosing, mixing and placing of fiber concrete or any exception

from above described recommendations. http://dramix.bekaert.com • building.us@bekaert.com