GUIDE TO
INSTANT CONCRETE
SANDS MORTARS

MAKING IT EASY
Hello.

One name is synonymous with concrete in New Zealand - Firth.

Alongside our rich history of developing and supplying concrete for roading, building and rural projects throughout every community in this part of the world, Firth are the pioneers of bagged concretes, mortars, plasters and sands in New Zealand.

Our constantly developing range of Dricon® products has been faithfully trusted by tradespeople and DIYers for all types of commercial and domestic construction purposes for over 40 years. All Dricon® products meet or exceed the appropriate AS/NZ standards for their application. Dricon® has been ISO accredited since 1994 (AS/NZS ISO 9001:2008).

The foundation of our success is built on a strong commitment to product innovation. Every Dricon® product is manufactured using industry leading robotic and automated technology. The finest quality raw materials enter an automated drying process that delivers dried aggregates and sands to storage silos. An automated recipe system, using the latest EMC weigh feeders, delivers a measured flow of processed raw materials and additives which are blended in a continuous auger, ensuring highly accurate product consistency. Once blended and packaged within this automated environment, each product is robotically palletised for despatch.

Quality control is paramount. We routinely batch test Dricon® product, internally and externally, ensuring only the highest quality product makes it onto the backs of utes, trucks and vans.

Our commitment to supporting sustainable practices within our organisation is an everyday undertaking.

We enjoy creating easy to use, highly effective instant Dricon® products.

We hope that you enjoy working with them.
### IDEAL FOR:
- Paths
- Foundations
- Mowing Strips
- Letter Boxes
- Block Fill

### HANDICRETE® IS DRY CONCRETE.
We scientifically blend HandiCrete® under controlled conditions, then package it into bags for tradespeople & DIYers to add water and mix. Once properly mixed, it’s as reliable as the product you’ll find inside Firth concrete trucks. HandiCrete® is formulated to reach 20MPa after 28 days.

### BENEFITS
- Convenient - all the ingredients in one bag
- Easy to plan how much to buy
- Easy to use - just add water
- Gives you a super smooth finish every time
- No mess - no leftover sand, cement and stones to clear away
- What you don’t use stays in the bag
- Refer to OxiTone® (page 17) for more information regarding colourants
- HandiCrete® is formulated to reach a target strength of 20MPa in 28 days (under standard curing conditions)

### YIELD
1 x 25kg HandiCrete® bag makes 0.012m³ of concrete / 1 x 40kg HandiCrete® bag makes 0.019m³ of concrete

### PATHS
1 lineal metre x 75mm deep x 1250mm wide = 5 x 40kg bags
1 lineal metre x 75mm deep x 600mm wide = 3.8 x 25kg bags

### MOWING STRIPS
1 lineal metre x 100mm deep x 150mm wide = 1.25 x 25kg bags

### POSTS
Use the table provided below to calculate the amount of Dricon® HandiCrete® needed for your hole based on:

<table>
<thead>
<tr>
<th>Height of post above ground</th>
<th>Length of post below ground/depth of hole</th>
<th>Bags per hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>feet</td>
<td>metres</td>
<td>feet</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>2.1</td>
<td>2.2</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>1.4</td>
</tr>
<tr>
<td>3</td>
<td>0.9</td>
<td>1</td>
</tr>
</tbody>
</table>

Table based on a nominal 100mm x 75mm post; 250mm hole diameter. Bags per hole are based on allowing for 100mm of topsoil over the concrete. This table is to be used as a guide only.

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.
**IDEAL FOR:**
- Foundations
- Block Fill
- Heavy Duty Paths
- Bridge Repair Work
- Bollards

**HIGH STRENGTH HANDICRETE®**
High Strength HandiCrete® is 40MPa dry concrete. Ideal for specialist highly-engineered commercial projects or when you require 20MPa high early strength in 3 days (after 28 days 40MPa will be achieved). Once properly mixed, it’s as reliable as the product you’ll find inside Firth concrete trucks.

**BENEFITS**
- Convenient – all the ingredients in one bag
- Easy to plan how much to buy
- Easy to use – just add water
- Gives you a super smooth finish every time
- No mess – no leftover sand, cement and stones to clear away
- What you don’t use stays in the bag
- High Strength HandiCrete® is formulated to reach a target strength of 20MPa in 3 days and 40MPa in 28 days (under standard curing conditions)

**YIELD**
One 25kg bag makes 0.012m³ of concrete
1 x lineal metre x 40mm deep x 300mm wide = 1 x 25kg bag

<table>
<thead>
<tr>
<th>Height of post above ground</th>
<th>Length of post below ground/depth of hole</th>
<th>Bags per hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>feet</td>
<td>feet/meters</td>
<td>25kg</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>7</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>5</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>0.9</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table based on a nominal 100mm x 75mm post: 250mm hole diameter. ‘Bags per hole’ are based on allowing for 100mm of topsoil over the concrete. This table is to be used as a guide only.

**HIGH STRENGTH HANDICRETE®**
High Strength HandiCrete® is 40MPa dry concrete. Ideal for specialist highly-engineered commercial projects or when you require 20MPa high early strength in 3 days (after 28 days 40MPa will be achieved). Once properly mixed, it’s as reliable as the product you’ll find inside Firth concrete trucks.

**BENEFITS**
- Convenient – all the ingredients in one bag
- Easy to plan how much to buy
- Easy to use – just add water
- Gives you a super smooth finish every time
- No mess – no leftover sand, cement and stones to clear away
- What you don’t use stays in the bag
- High Strength HandiCrete® is formulated to reach a target strength of 20MPa in 3 days and 40MPa in 28 days (under standard curing conditions)

**YIELD**
One 25kg bag makes 0.012m³ of concrete
1 x lineal metre x 40mm deep x 300mm wide = 1 x 25kg bag

<table>
<thead>
<tr>
<th>Height of post above ground</th>
<th>Length of post below ground/depth of hole</th>
<th>Bags per hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>feet</td>
<td>feet/meters</td>
<td>25kg</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>7</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>5</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>0.9</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table based on a nominal 100mm x 75mm post: 250mm hole diameter. ‘Bags per hole’ are based on allowing for 100mm of topsoil over the concrete. This table is to be used as a guide only.

**RAPIDSET™**
RapidSet™ instant post hole concrete is dry concrete with special additives that will make the concrete set in 15 minutes (at 21°C) when added to water. However, warmer outside temperatures (summer) means a faster set time, colder temperatures (winter) means a slower set time. RapidSet™ will reach 12.5MPa after 28 days and is suitable for non-structural projects such as fence posts in ground conditions which will allow for possible concrete expansion. Structural projects such as foundations and decking require High Strength RapidSet™ at 30MPa.

**BENEFITS**
- No bracing – just hold the post in position for a few minutes and RapidSet™ will go to work
- RapidSet™ will set in 15 minutes. After one hour it will have gained significantly enough strength to enable you to carry on working (e.g. fixing rails), as long as the area is not exposed to rigorous use
- RapidSet™ saves you time and effort
- No mixing – just pour water into the hole and slowly pour RapidSet™ straight into hole
- No mess – no leftover sand, cement and stones to clear away
- What you don’t use stays in the bag
- RapidSet™ is formulated to reach 12MPa after 28 days
- You don’t have to wait for hours for concrete to set

**YIELD**
1 x 25kg RapidSet™ bag makes 0.012m³ of concrete
Use the table provided below or calculate the amount of RapidSet™ needed for your hole based on:

<table>
<thead>
<tr>
<th>Height of post above ground</th>
<th>Length of post below ground/depth of hole</th>
<th>Bags per hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>feet</td>
<td>feet/meters</td>
<td>25kg</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>7</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>5</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>0.9</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table based on a nominal 100mm x 75mm post: 250mm hole diameter. ‘Bags per hole’ are based on allowing for 100mm of topsoil over the concrete. This table is to be used as a guide only.

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.
IDEAL FOR:
- FOUNDATIONS
- STRUCTURAL APPLICATIONS
- HEAVY DUTY FENCING
- RETAINING WALLS
- LARGER WASHING LINES
- SUN SAIL POSTS

HIGH STRENGTH RAPIDSET™
High Strength RapidSet™ Instant Post Hole Concrete is dry concrete with special additives that will make the concrete set in 15 minutes (at 21° Celsius) when added to water. However, warmer outside temperatures (summer) means a faster set time, colder temperatures (winter) means a slower set time. High Strength RapidSet™ Instant Post Hole Concrete is formulated to reach 30MPa after 28 days.

BENEFITS
- No bracing – just hold the post in position for a few minutes and High Strength RapidSet™ will go to work
- High Strength RapidSet™ will set in 15 minutes. After one hour it will have gained significantly enough strength to enable you to carry on working (e.g., fixing rails), as long as the area is not exposed to rigorous use
- You don’t have to wait for hours for concrete to set
- No mixing – just pour water into the hole and slowly pour High Strength RapidSet™ straight into hole
- No mess – no leftover sand, cement and stones to clear away
- What you don’t use stays in the bag
- High Strength RapidSet™ is formulated to reach a target strength of 30MPa in 28 days (under standard curing conditions)

YIELD
One 20kg High Strength RapidSet™ bag makes 0.01m³ of concrete

Use the table provided below or calculate the amount of High Strength RapidSet™ needed based on:

<table>
<thead>
<tr>
<th>Height of post above ground</th>
<th>Length of post below ground/depth of hole</th>
<th>Bags per hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>feet</td>
<td>metres</td>
<td>20kg</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>2.1</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>2.1</td>
</tr>
<tr>
<td>5</td>
<td>1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>3</td>
<td>0.9</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.

IDEAL FOR:
- PLASTERING
- ROUGHCAST
- BRICK & BLOCK LAYING

MORTAR PLASTER
Dricon® MortarPlaster is a mixture of specially graded clean sands, cement and a powdered plasticiser, proportioned to give an easy to use plaster and mortar mix and is formulated to reach a target strength of 15MPa in 28 days.

BENEFITS
- Dricon® MortarPlaster saves time and effort
- Convenient – all the ingredients in one bag. Easy to plan how much to buy
- MortarPlaster is easily workable to achieve a variety of plaster finishes
- Easy to use – just add water
- No mess – no leftover sand or cement to clear away
- What you don’t use stays in the bag
- Refer to OxiTone® (page 17) for more information regarding coloured mortars
- MortarPlaster is formulated to reach a target strength of 15MPa in 28 days (under standard curing conditions)

YIELD
Use the table provided below to calculate the amount of MortarPlaster needed.

This table is to be used as a guide only.

<table>
<thead>
<tr>
<th>Plaster with a 10mm cover</th>
<th>Concrete Bricks</th>
<th>Blocks 20 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>per 25kg 1.2m²</td>
<td>24-28</td>
<td>16-19</td>
</tr>
</tbody>
</table>

This table is to be used as a guide only.

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.
**IDEAL FOR:**

**FIXING PEDESTALS / HINGE PINS / REFIXING PIPES / PLUGGING AND GROUTING / EMPTY WATER TANK REPAIRS / REPAIR WORK WHEN LIMITED TIME IS AVAILABLE TO COMPLETE THE JOB / RAISING MANHOLE LIDS IN ROADWAYS / ROADWAY KERBING REPAIR / TILT SLAB JOINTING / GULLY TRAP INSTALLATION / WATER METER BOX INSTALLATION**

**SUPERSET™**

Dricon® SuperSet™ is a dry blend of cements, additives and sands formulated for applications requiring quick setting and high early strength. SuperSet™ is formulated to reach a target strength of 60MPa in 28 days.

**IDEAL FOR:**

**FOR ALL TYPES OF MASONRY, BRICK & STONE WORK**

**TRADE MORTAR**

Trade Mortar is clean graded sand, cement and plasticiser proportioned to give an ideal spreadable and workable mortar for all types of masonry, brick and stone work, for the trade. Trade Mortar is formulated to reach a target strength of 12.5MPa in 28 days.

**BENEFITS**

- Minimises operational disruption
- High strength
- Can be used for a wide range of tasks
- Convenient range of packaging sizes available: 6kg & 20kg pail and 25kg bag
- Pail packaging is suitable for storage and handling in work vehicles
- The working time for SuperSet™ is approximately 10 – 15 minutes at 21° Celsius (longer at lower temperatures and shorter at higher temperatures)
- SuperSet™ is quick setting, and is formulated to reach a target strength of 12MPa in 2 hours, and 60+MPa in 28 days (under standard curing conditions). See test data below
- Airtight re-sealable pail lids mean you only use as much as you need for small repair jobs

**YIELD**

Use the table provided below to calculate the amount of SuperSet™ needed.

<table>
<thead>
<tr>
<th>6kg</th>
<th>20kg</th>
<th>25kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.003m³</td>
<td>0.009m³</td>
<td>0.012m³</td>
</tr>
</tbody>
</table>

This table is to be used as a guide only.

<table>
<thead>
<tr>
<th>Concrete Bricks 230 x 90 x 70mm</th>
<th>Clay Bricks 230 x 76 x 70mm</th>
<th>Blocks 20 Series 390 x 190 x 190mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>33-38</td>
<td>38-45</td>
<td>21-26</td>
</tr>
</tbody>
</table>

**TYPICAL TEST DATA (AT 21°C)**

<table>
<thead>
<tr>
<th>Compressive Strength</th>
<th>2 hours</th>
<th>6 hours</th>
<th>24 hours</th>
<th>7 days</th>
<th>28 days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12MPa</td>
<td>15MPa</td>
<td>28MPa</td>
<td>55MPa</td>
<td>60+MPa</td>
</tr>
</tbody>
</table>

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.

**BENEFITS**

- Minimises waste
- Accepted and endorsed by key trade users
- Has consistent material calculations from bag to bag
- Contains an accepted dry plasticiser endorsed by the trade
- 30kg bag size for ease of handling and emptying
- Refer to Coloured Trade Mortar (page 13) or OxiTone® (page 17) for more information regarding coloured mortars
- Dricon® Trade Mortar is formulated to meet NZS 4210:2001 Masonry Construction: Materials and workmanship of 12.5MPa after 28 days
- Also available in a water resistant formulation

**YIELD**

Use the table provided below to calculate the amount of Trade Mortar needed.

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.
CLAY BRICK TRADE MORTAR
Clay Brick Trade Mortar is clean graded sand, cement and plasticiser proportioned to give an ideal spreadable and workable mortar for brick work, for the trade. Clay Brick Trade Mortar is formulated to reach a target strength of 12.5MPa in 28 days. The ingredients in Clay Brick Trade Mortar are specifically designed to produce a smooth finish when correctly tooled so as to match the smooth nature of clay bricks.

IDEAL FOR:
FOR ALL TYPES OF BRICK, MASONRY & STONE WORK

BENEFITS
• Minimises waste
• Accepted and endorsed by key trade users
• Has consistent material calculations from bag to bag
• Contains an accepted dry plasticiser endorsed by the trade
• 30kg bag size for ease of handling and emptying
• Refer to Coloured Trade Mortar (page 13) or OxiTone® (page 17) for more information regarding coloured mortars
• Clay Brick Trade Mortar is formulated to meet NZS 4210:2001 Masonry Construction: Materials and Workmanship of 12.5MPa after 28 days
• Also available in a water resistant formulation

YIELD
Use the table provided below to calculate the amount of Clay Brick Trade Mortar needed.

<table>
<thead>
<tr>
<th>Volume</th>
<th>Clay Bricks</th>
</tr>
</thead>
<tbody>
<tr>
<td>30kg Bag</td>
<td>0.014m³  38-45</td>
</tr>
</tbody>
</table>

This table is to be used as a guide only.

COLOURED TRADE MORTAR
Coloured Trade Mortar is clean graded sand, cement, oxide powders and plasticiser proportioned to give an ideal spreadable and workable mortar for all types of masonry, brick and stone work, for the trade. Coloured Trade Mortar is formulated to reach a target strength of 12.5MPa in 28 days.

IDEAL FOR:
FOR ALL TYPES OF MASONRY, BRICK & STONE WORK

BENEFITS
• Colours available: Cream, Antique Cream, Matakana Cream, Premium White, Antique White, Buff, Black, Charcoal, Dark Brown, Light Brown, Hinuera, Pumice, Natural, Sandy Grey and Serenity. Customised colours available upon request
• Accepted and endorsed by key trade users
• Easy colour matching
• Minimises waste
• Provides consistency of colour throughout the job
• Contains an accepted dry plasticiser endorsed by the trade
• 30kg bag size for ease of handling and emptying
• Coloured Trade Mortar is formulated to meet NZS 4210:2001 Masonry Construction: Materials and Workmanship of 12.5MPa after 28 days
• Also available in a water resistant formulation

YIELD
Use the table provided below to calculate the amount of Coloured Trade Mortar needed.

<table>
<thead>
<tr>
<th>Volume</th>
<th>Concrete Bricks</th>
<th>Clay Bricks</th>
<th>Blocks 20 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>30kg Bag</td>
<td>0.014m³</td>
<td>33-38</td>
<td>38-45</td>
</tr>
</tbody>
</table>

This table is to be used as a guide only.

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.

Important Variation Notice:
Mixing time and the amount of water used will affect the final colour result. To ensure a uniform colour finish, Dricon® strongly recommend you purchase Coloured Trade Mortar from one location and from the same batch, as colour variations will occur due to the natural variance in raw materials. While every care has been taken to ensure an accurate representation, the colours shown here are subject to the limitations of the colour printing process.

Note: All mortars and concrete products may exhibit a ‘whitening’ otherwise known as efflorescence which neither affects strength nor durability.
PAvESAND™
PAvESAND™ is a specially dried, formulated sand product applied to the surface of the paving. It flows into joints and, when fully compacted, ensures lock-up and load transfer critical to the long-term performance of paving. PaveSand™ is essential to ensure the overall performance and quality of the paving.

PaveLock®
PaveLock® pave bonding sand is a stabilising jointing sand that enhances the durability and appearance of paved surfaces. The combination of correctly graded sands and additives in PaveLock® form a semi-pliable joint when activated with water. PaveLock® is resistant to weed growth and insect infestation, making it a maintenance free alternative to standard PaveSand™. The sands used in PaveLock® meet the New Zealand NZS 3116:2002: Concrete Segmental Paving for jointing sand grading.

**IDEAL FOR:**
FILLING JOINTS IN DOMESTIC, MUNICIPAL & INDUSTRIAL PAVING JOBS

**IDEAL FOR:**
FILLING JOINTS IN DOMESTIC & MUNICIPAL PAVING JOBS

**YIELD**
(Paver recommended gap width 2-4mm)

<table>
<thead>
<tr>
<th>Example</th>
<th>80mm</th>
<th>60mm</th>
<th>50mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per 20kg</td>
<td>3.5m²</td>
<td>5m²</td>
<td>6m²</td>
</tr>
<tr>
<td>Per 40kg</td>
<td>7m²</td>
<td>10m²</td>
<td>12m²</td>
</tr>
</tbody>
</table>

This table should be used as a guide only, as the area covered per bag depends on the face size of the paver and the number of joints per square metre.

**BENEFITS**
- Flows easily into paving joints
- Provides strength to paved surfaces
- Ensures "lock-up" of paving
- Ensures load transfer in paved area
- Maximises long-term performance of paving
- PaveSand™ meets NZS3116:2002: Concrete Segmental Paving

**YIELD**
Use the table provided below to calculate the amount of PaveLock® needed.

<table>
<thead>
<tr>
<th>Example</th>
<th>80mm</th>
<th>60mm</th>
<th>50mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per 20kg</td>
<td>3.5m²</td>
<td>5m²</td>
<td>6m²</td>
</tr>
<tr>
<td>Per 40kg</td>
<td>7m²</td>
<td>10m²</td>
<td>12m²</td>
</tr>
</tbody>
</table>

This table should be used as a guide only, as the area covered per bag depends on the face size of the paver and the number of joints per square metre.

**BENEFITS**
- Provides locked in strength and durability for paved surfaces
- Is resistant to weed growth and insect infestation making it a maintenance free alternative to standard PaveSand™
- Easy to use - please follow instructions on rear of pack
- Requires minimum maintenance after installation
- Effective long-term bonding of joints in areas of high wind and steep gradients
- The sands used in PaveLock® meet NZS 3116:2002: Concrete Segmental Paving for jointing sand grading

**Warning** - Pavers that have an open surface texture will trap some PaveLock® and this may cause some discolouration on the paving surface. This can be minimised by ensuring PaveLock® and other surface contaminants are swept off prior to the application of water. It is recommended that a small test area be trialled before applying PaveLock® to the entire paved area. Not suitable for most large format flagstone pavers. Pavers must have a laid gap width of no more than 2-4mm. Pavers must be compacted in order for PaveLock® to work effectively.
IDEAL FOR:

WHITE PORTLAND CEMENT GIVES YOU THE OPPORTUNITY TO CHOOSE AMONG ALL THE COLOURS OF THE SPECTRUM WHEN PRODUCING YOUR DRY MIX APPLICATION.

WHITE PORTLAND CEMENT IS ALSO PERFECT IN CONCRETE FOR PAVING STONES AND FLAGSTONES, SCULPTURES, IN TERRAZZO PANELS, BALCONIES, CORNICES, ORNAMENTS, FOR SWIMMING POOLS AND IN LIGHT POINTING MORTAR.

WHITE PORTLAND CEMENT

Is characterised by its whiteness, uniform composition and performance. It is suitable in any application requiring premium whiteness and strength and it conforms to most national standards including:

1. MS 888-1991    2. EN 197-1 type CEM I 52.5N    3. AS 3972 type GP and HE

BENEFITS

• Cleaner brighter colours are achieved when using with oxides
• White colour is achieved for specific design application
• Consistent quality to meet the requirements of architects, engineers and builders
• White Portland Cement is fine in texture

OXITONE®

Synthetic Iron Oxide colours are for use in cement based products - concrete, mortar and plaster mixes. The colour table below represents indicative colours obtained at 4% Oxitone® to cement ratio. The colours illustrated are intended as a guide only and do not represent the colour of the final mixed product. For example the use of white oxides in products containing grey cement will not produce a white coloured finished product. White oxide will only work effectively in products containing white cement. We recommend Dricon® White Portland Cement.

BENEFITS

• Manufactured to exacting standards
• Meets or exceeds standards for the use of colour for concrete, mortar and plaster applications
• Are colour resistant and colour stable
• Can be used with High Strength HandiCrete®, SuperSet™, Trade Mortar, Mortar Plaster, HandiCrete®, Clay Brick Trade Mortar
• Won’t contribute to efflorescence

YIELD

<table>
<thead>
<tr>
<th>Product</th>
<th>Oxide</th>
<th>Product</th>
<th>Oxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement - 20kg</td>
<td>800g</td>
<td>Cement - 40kg</td>
<td>1.6kg</td>
</tr>
<tr>
<td>MortarPlaster - 25kg</td>
<td>300g</td>
<td>Trade Mortar - 30kg</td>
<td>330g</td>
</tr>
<tr>
<td>HandiCrete® - 25kg</td>
<td>160g</td>
<td>HandiCrete® - 40kg</td>
<td>260g</td>
</tr>
</tbody>
</table>
**BULK BAGS**

**IDEAL FOR:**
- BUILDERS MIX / BUILDERS SAND
- PLASTER SAND / EAST COAST SAND
- FILTRATION SAND / SCORIA 25/7 / SAP 7
- WET PEA METAL A / WET PEA METAL B

**BENEFITS:**
- Easy to use and transport - no spillage
- No waste as the bags tie at the top
- Bags are returnable with deposits for bags credited upon return
- Bags have straps for fork lift handling
- Bags have release strings for ease of emptying

**BAGGED WET MIXES**

Dricon’s range of blended wet mixes are suitable for the tradesperson or home improver that prefers to add their own cement and admixtures. Available in 25kg bags, 250kg and 500kg bulk bags.

**BUILDERS MIX**
A blend of 14mm chip and No. 1 river sand which contains the absolute minimum of salts. Builders Mix is ideal for mixing with cement for small concreting jobs around the home.

**BUILDERS SAND**
 Builders Sand is a general purpose No.1 river sand which contains the absolute minimum of salts. It is ideal for use as a concrete sand, for basic mortars, children’s sand pits and as a paving stone sub base. In general it has a top particle size of 1.18mm and a bottom particle size of 0.15mm with an average size of 0.4mm.

**PLASTER SAND**
Plaster Sand is a blend of No.1 river sand and a scientifically graded fine sand which contains the absolute minimum of salts. It is formulated specifically for plaster and mortar mixes. In general it has a top particle size of 1.18mm and a bottom particle size of 0.15mm with an average size of 0.3mm.

**EAST COAST SAND**
East Coast Sand is an east coast dune sand and is often referred to as Bricklayers Sand. It contains the absolute minimum of salts. It is ideal for mortar mixes. In general it has a top particle size of 0.6mm and a bottom particle size of 0.075mm with an average size of 0.3mm.

**FILTRATION SAND**
Filtration Sand is a quarry sand which contains the absolute minimum of salts. It is dried and specifically graded for use in filtration systems. It is generally used in domestic pool filtration. In general it has a top particle size of 2.36mm and a bottom particle size of 0.4mm with an average of 1.18mm.

**CULVERT BAGS**

**IDEAL FOR:**
- CULVERTS / NON-STRUCTURAL RETAINING WALLS / EROSION CONTROL / BRIDGE ABUTMENTS / GABIONS / TRACK STABILISATION / FARM SUPPORT

**BENEFITS:**
- Minimises waste
- Easy to use and transport
- Has a consistent material calculation form bag to bag
- 25kg bag size for ease of handling
- Specialised bag construction for rapid breakdown

Dricon® Culvert Bags come in 25kg paper bags for easy maneuverability and a fast bag material breakdown.
COMMERCIAL PRE MIXES

Dricon® has a range of commercial pre mix bagged products available. Below is a list of the standard range however other products are available upon request. Contact 0800 DRICON to discuss your specific requirements.

50/50 REPAIR MORTAR

50/50 Repair Mortar is a blend of fine white sand and grey and white cement. It is ideal for repair work on pre-cast concrete panels and tanks. Available in 25kg bags.

ROOFING BEDDING MORTAR

Roofing Bedding Mortar is a mortar product for the fixing of concrete and clay roof tiles. It is a base product that is factory tuned to meet individual specific customer requirements. Available in 25kg bags.

SHOTCRETE

Shotcrete is used in shotcrete spray pump machines otherwise known as gunite machines. It is primarily used for earth stabilisation purposes. It is available in 25kg and 40kg bags and 250kg, 500kg and 1 tonne bulk bags.

TANK PLAST

Tank Plast is a plaster product used for the manufacture of water tanks. It is available in 25kg and 40kg bags and 250kg, 500kg and 1 tonne bulk bags.

DRAINAGE & LANDSCAPING PRODUCTS

Dricon® has a range of bagged drainage and landscaping products available. This range has not been kiln dried. Below is a list of the standard range however other products are available upon request. They are available in 25kg bags and 250kg, 500kg and 1 tonne bulk bags.

SCORIA 25/7

Scoria 25/7 is a graded scoria suitable for infill, drainage and landscaping purposes.
Size range is between 7 – 25mm.

SAP7

SAP7 is a fine grade of scoria suitable for infill, drainage and landscaping purposes.
Size range is less than 7mm.

WET PEA METAL A

Wet Pea Metal A consists of a rounded river pebble suitable for drainage and landscaping purposes.

WET PEA METAL B

Wet Pea Metal B consists of a rounded river gravel suitable for drainage and landscaping purposes. In general it has a top particle size of 5mm and a bottom particle size of 0.6mm with an average size of 1.4mm.

WET PEA METAL C

Wet Pea Metal C consists of a sharp graded chip suitable for drainage and landscaping purposes.

LANDSCAPING SHELL

Landscaping Shell is a crushed shell that is great for walkways, driveways and a range of other decorative uses.
COMMERCIAL DRIED SANDS

Dricon® has a large range of bagged commercial dried sands, pebbles and aggregates available. Below is a list of the standard range however other products are available upon request. They are available in 25kg bags and 250kg, 500kg and 1 tonne bulk bags. Contact 0800 DRICON to discuss your specific requirements.

**CASTLE SAND**

Castle Sand is suitable for concretes, mortars, grouts, plasters and paints. It can also be used in sand pits. In general it has a top particle size of 1mm and a bottom particle size of 0.15mm with an average size of 0.4mm.

**IRON SAND**

Iron Sand is a product used for abrasives blasting. In general it has a top particle size of 0.6mm and a bottom particle size of 0.75mm with an average size of 0.2mm.

**TENNIS SAND**

Tennis Sand is a river sand that is designed for use in artificial turf areas. In general it has a top particle size of 2.36mm and a bottom particle size of 0.15mm with an average size of 0.6mm.

**NO. 1 SAND**

No. 1 Sand is a river sand suitable for a range of uses including concretes, mortars, grouts, plasters and paint. In general it has a top particle size of 2.36mm and a bottom particle size of 0.15mm with an average size of 0.45mm.

**FOUNDRY SAND**

Foundry Sand is a white sand suitable for foundry moulding, stone mason work and as a raw material for fine plastering, grouting and paints. In general it has a top particle size of 0.6mm and a bottom particle size of 0.15mm with an average size of 0.45mm.

**FILTRATION SAND**

It is generally used in commercial filtration. In general it has a top particle size of 2.36mm and a bottom particle size of 0.6mm with an average size of 1.18mm.

**PEA METAL A**

Dried Pea Metal A is suitable for a range of uses including concretes, floor screeds, infill, filtration, backfill and landscaping. Dry Pea Metal A is a rounded river pebble. In general it has a top particle size of 7mm and a bottom particle size of 1mm with an average size of 3.5mm.

**PEA METAL B**

Dried Pea Metal B is suitable for a range of uses including concretes, floor screeds, infill, filtration, backfill and landscaping. Dry Pea Metal B is a rounded river gravel. In general it has a top particle size of 5mm and a bottom particle size of 0.6mm with an average size of 1.6mm.

**PEA METAL C**

Dried Pea Metal C is suitable for a range of uses including concretes, floor screeds, infill, filtration, backfill and landscaping. Dry Pea Metal C is a sharp graded chip. In general it has a top particle size of 7mm and a bottom particle size of 3mm with an average size of 5mm.

**PLAYGROUND SAND**

Playground sand is certified to meet NZ 5828:2004 (BSEN 1177:1988 Impact Absorbing Playground Surfacing - Safety requirements and test methods). It is designed for use in playground areas. In general it has a top particle size of 2.36mm and a bottom particle size of 0.15mm with an average size of .45mm.

**BOWLING SAND**

Bowling Sand is a river sand that is designed for use in artificial turf areas. In general it has a top particle size of 1mm and a bottom particle size of .15mm with an average size of .4mm.
Prepare the post hole. In sandy soils you may have to line the hole with plastic to contain the water. Position the post in the hole and thoroughly saturate the walls of the hole and the post, so they do not soak up the water needed for the concrete.

Add recommended quantity of water to the hole (3.5 litres per bag) and pour RapidSet™ at a steady and even rate around the post into the water. Take approximately 1 minute per bag. Do not pour too fast. The idea is to wet the concrete as it falls to the bottom.

After just a few minutes the RapidSet™ will have set sufficiently to allow you to align post to desired position. Bracing is not necessary, but if desired, have bracing ready before adding RapidSet™. Once post is aligned allow RapidSet™ to harden undisturbed for 15 minutes. Wait at least one hour before working with the post.

**RAPIDSET™ & HIGH STRENGTH RAPIDSET™**

**POSTS:**
- When using Dricon® products for post holes, avoid using wet sloppy concrete that will shrink away from the sides of the hole. Follow the mixing instructions on the bag.
- For a grass finish fill the hole leaving a 100mm gap at the top to fill in with soil.

**HOW BIG SHOULD MY POST HOLE BE?**
- ¼ of your post’s length needs to be installed below ground. For example, a 3200mm post should be 800mm in the ground.
- Post holes should be at least 250mm in diameter or width. For posts 100mm x 100mm and larger, aim for 100mm gap between the post and the side of the hole. As a general guide the hole should be three times the width of the post.
- Dig your hole a little deeper than required and add stones to the bottom of the hole to bring the post up to the desired height. This is easier than cutting the posts to the right height after the posts are in the ground.

**FOUNDATIONS:**
- Foundations for projects such as brick barbeques, low garden walls, and garden sheds should be at least 100mm thick.
- Construction of load bearing structures such as boundary fences, retaining walls and structural walls, usually require foundations subject to engineering considerations and council approval. Phone 0800 374 266 (0800 DRICON) for advice or consult a building professional.

**PATHS:**
- Be generous about path width, major paths should be not less than 1250mm. For secondary paths 600mm is sufficient. Make sure you have enough room for boxing and pegs.
- Your path should be 75mm thick, and provided the path is used by pedestrians only, no reinforcement is necessary.
- If your path will at anytime be subject to vehicle traffic, a minimum depth of 100mm thick should be used in conjunction with reinforcement.

**MORTAR & PLASTER WORK:**
- Only mix as much mortar as you can use up in one hour. Unused mortar that has started to stiffen must be disposed of and NOT softened by mixing more water.
- For plastering and for clay bricks it is advisable to moisten the surface so that the clay bricks or plaster surface does not absorb too much water from the fresh plaster or mortar. Excess water absorbed from the plaster or mortar will cause the plaster or mortar to lose strength.
- Masonry blocks and bricks should be laid dry.

**REPAIRS:**
- Wet concrete does not adhere to hardened concrete.
- You will either have to:
  1. Cut out and totally remove all the concrete from the affected section, and re-concrete using HandiCrete®.
  2. Remove the loose concrete and replace with fresh concrete using a bonding agent to adhere the two surfaces.
- To repair small non-structural cracks use Dricon® MortarPlaster.
- SuperSet™ does not require a bonding agent.

**MOWING STRIPS & GARDEN EDGES:**
- An ideal width for the edge is 150mm, so dig a trench 250mm to accommodate the boxing and pegs.
- A depth of 75mm will be sufficient.
- Use spacing joints to control cracking from shrinkage.
- Try to keep mowing strips level to the lawn, this will protect your garden and your lawn mower.
Pour 3.8 to 4.2 litres of water into the mixer then add the Dricon® Trade Mortar mix.

Ensure the pavers have had an initial vibrating plate compaction of 2 passes to bed them in to the underlying bedding sand. Remix the product dry in a wheelbarrow or clean dry concrete mixer to ensure that the contents of the bag are fully reintegrated.

Arrange PaveLock® in at least 5 or 6 piles over the dry paved area to ensure the entire area is covered.

Mix this for 5 or 6 minutes. It may be necessary to add small quantities of water to bring the mix up to its final desired level of workability.

The material combination in Dricon® Trade Mortar is designed to give the tradesperson maximum spreadability and workability. The sand, cement and plasticiser ratios are tuned for brick and blocklaying purposes. The board life under normal weather conditions is on average 30-35 minutes.

Sweep PaveLock® into joints using a stiff broom. Fill the joints to the top of the pavers and compact for at least 2 passes initially, refill joints and then complete final compaction. Ensure pavers are free from residue.

Lightly spray with water until the paved area is saturated and water is ponding. Avoid spraying directly into the joints as this may dislodge PaveLock®. The surface will be usable after one good drying day.

Please note: Please ensure you fully read all instructions on back of PaveLock® pack.
For more information and advice:

0800 374 266 (0800 DRICON)

or visit www.dricon.co.nz