

# Do's and Don'ts of Readymixed Concrete

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#### **Ordering**

As much information as possible should be provided when enquiring about orders, deliveries and cost of ready-mix concrete, this will allow us to plan vehicles and keep clear records of quoted jobs.

Please order the correct consistence for each specific job, rather than adding water in site, as this is bad practice and will adversely affect the quality of the final product. It will also render void any guarantees with regard to the concrete. Please also allow for sufficient time for delivery when placing you orders.

#### **Specifics for DIY customers**

We can advise you as to the strength of concrete that will best suit, (based upon European Standards) and will also be able to help with regards to calculating volume or quantities of concrete required. However, our recommendations are only advice and we cannot be held responsibly for incorrect orders.

We also provide coloured and pattern imprinted concrete, which are subject to availability and additional costs. Please enquire when placing order if you request more information regarding pattern or coloured concrete.

#### **Selecting the correct consistence**

The most common way of specifying consistence is by slump class. The following classes are with the likely target slump:

Slump Class:	Likely Target Slump (mm)
S1	20
S2	70
\$3	120
S4	180

Slump is now specified and measured to the nearest 10mm.



Concrete can be supplied in different strengths ranging from 10N (Nuton) to 50 N, they can be supplied with 10mm or 20mm chips.

## **Delivery**

We have a number of different ready-mix trucks used for deliveries; these trucks vary in size and design to suit different types of work undertaken.

• The dimensions of our **6m3 trucks** are as follows:

Approximately, 9m long, 2.5m wide and 3.8m high. Weight 10 tonnes when empty and 25 tonnes when fully loaded with normal weight concrete.

On arrival at the site the concrete is discharged in a chute that extends approx 2.7m from the back of the truck. The chute can be maneuvered from side to side to assist concrete discharge.

\*Picture\*

- We can provide a concrete truck with **conveyor** which extends 11m. If you require the use of the conveyor for a specific job please specify when ordering concrete, the conveyor is subject to availability and additional costs.
- We have a **'Mini Mixer'** when is very advantageous for smaller jobs and tighter sites. The demission's are

#### \*Picture\*

It is also possible for concrete to be collected from our facility, however correct transportation is essential, for example car trailer, small tipper truck or pick up. Please contact us in due time to arrange concrete collection as there needs to be a onsite truck available to load the ready-mix.

#### Safety for concrete access and discharge

For ALL sites safe access for the delivery truck should be provided, taking into consideration the weight and size of the truck when fully loaded. The condition of the site ground is also important as heavy vehicles may get stuck in softer ground.

Please note that the truck driver will maintain a safe distance from any excavation or dangerous area. Also please consider how the concrete is going to be moved from the point of discharge to its final position before placing the order.

#### Part Load Charges

Part loads charges apply to any order that does not require a full load. This cost will be in-built into your quotation at the enquiry stage. Please be aware that under ordering then requiring an additional meter to finish the job will result in additional costs due to the need for another truck load.

#### **Waiting Time Charges**

We consider a certain period of time for adequate on site discharge of ready-mix, which is free of charge. However, please be aware there are additional charges for delaying the truck on site. Please enquire when ordering in relation to waiting times and additional waiting costs.

#### Weather Conditions and Concrete

**Cold weather:** Care should be taken when concrete is poured in cold weather, if it is unprotected it may result in damaging the concrete and making it unfit for use. We monitor weather conditions and concrete temperatures and will do our best to inform you prior to supply if the temperature of the fresh concrete at the time of delivery is likely to fall below 5 Degrees Celsius, then extra precaution is necessary. However, it is the customer/contractors responsibility to protect and insulate the concrete on site on order to avoid any 'freeze thaw' damage.

In cold conditions, once placed the concrete surface should be covered with insulating material for protection. It should be noted that very cold temperatures will lead slower rates of strength gain, and as a result, curing and striking times will be extended.

**Hot weather:** High temperatures will increase the overall temperature of the concrete resulting in a combination of evaporation of mix water, and a more rapid hydration of the cement, leading to faster hardening. Precaution should be taken when the temperature is above 20 Degrees Celsius for example ordering concrete suitable consistence (higher than normally due to

workability loss through evaporation), place compact and finish as soon as possible, and apply more men to the job.

# **Curing**

Concrete should be cured and protected from the environmental impacts. For example wind, rain and sun which can cause significant damage to the concrete.

### **Health and Safety**

When concrete is in contact with skin, irritation is likely to occur due to the alkaline nature of cement. Potential effects can include, dry skin, dermatitis or sever burns. Please take relevant precautions when working with concrete.

- If concrete gets into eye's immediately wash with clean water and seek medical attention.
- Wash any wet concrete off skin immediately, barrier creams are available but we recommend personal protective equipment as seen below.
- If lifting concrete please take care as if can be very heavy and may cause physical injury.
- We encourage heavy duty above the ankle boots or wellington boots if working with concrete.

The following are the **Personal Protective Equipment** (PPE) we recommend:

• Safety spectacles or goggles



• Waterproof gloves **\*worn at all times\*** 



• Long trousers, with knee pads if required



• Steel toe wellington boots



## **Our Quality Standards**

We are accredited by the NSAI giving us a licence to use the Irish standard mark to indicate conformity to the European Standard I.S. EN 206-1:2002. A copy of this cert can be got by request, please contact us if you require a copy.



#### **Reference:**

British Ready-Mixed Concrete Association, (2009), "Do's and Don'ts of Ready Mix Concrete", Surry, England.

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