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# KLEEN KOTE™ - General Vibration Facts

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## What Are Some Common Misconceptions Regarding Vibration?

- "I need the BIGGEST vibrator I can get. I want to MOVE the mud!"
- "That's the model my Dad and Grand Dad use to use. That will work GREAT!"
- "HIGH FREQUENCY...That sounds high tech. It MUST work better!"

o The vibration that you use should be dictated by the type of work that you are performing.

## Why Do We Use Vibration?

- To increase consolidation
- To increase productivity
- To reduce the amount of cement needed to increase strength
- To increase the density of the surface and seal the concrete
- To give a beautiful finish

***The correct answer is...To increase consolidation.***

## The Rules of Vibration

### *How big of a vibrator do I need?*

- In general, the area of influence for internal vibrators is 10 TIMES the diameter of the vibrator head.
  - However, it is best to observe the area of influence on the surface of the concrete you are vibrating to help determine the vibrators area of influence.
- Good vibration always requires overlapping areas of energy.
- Always pick the right size vibrator for the job.

### *How long should I leave the vibrator ON or in one place?*

- Generally speaking, if the concrete slump is approximately 2 inches, then the vibrator needs approximately 25 seconds to reach the maximum area of influence. If the slump is approximately 6 inches, then the vibrator needs approximately 10 seconds to reach its maximum area of influence.
- Keeping the vibration spacing and timing consistent will produce the best results.
- Remember you need OVERLAPPING areas of influence.

### *How should I vibrate the concrete when pouring in lifts?*

- When concrete is poured in lifts, always vibrate each lift.
- Always penetrate approximately 4 to 6 inches INTO any cold joint. This is done to bind the joints together.
- Do NOT always leave internal OR external vibrators running while you are pouring. They should be used intermittently as you pour your concrete. Similar rules apply to external vibration regarding the area of influence and timing.

### *Are there any other tips for vibration?*

- Do NOT let the vibrator head hit the sides of the forming system; this action will make the concrete stick to the forms. Always try to keep the vibrator in the center of the forms or at least 1 to 2 inches from any form face or bottom.
- Be sure to insert the vibrator completely into the concrete. In general, the vibration extends laterally from the vibrator head NOT vertically.
- Remove the vibrator slowly, allowing the concrete to fill in behind it.
- Over vibration can be just as bad as under vibration. Over vibration can cause the aggregate to settle in the pour, weakening the concrete.

**THIS INFORMATION IS PROVIDED AS A *GENERAL GUIDE TO VIBRATION* AND**
***IS NOT A SUBSTITUTE FOR PROPER TRAINING.***

If you have any questions regarding this sheet please feel free to contact Customer Support.