

# Jointing Concrete

## CONTROL (CONTRACTION) JOINTS

- Create weakened sections to control crack locations
- Accommodate movements caused by temperature changes and drying shrinkage
- Prevent vertical, but permit slight horizontal movement
- Are neater in appearance and easier to keep sealed than uncontrolled cracks, and cause fewer maintenance problems (for heavy forklift traffic, saw cut joints)

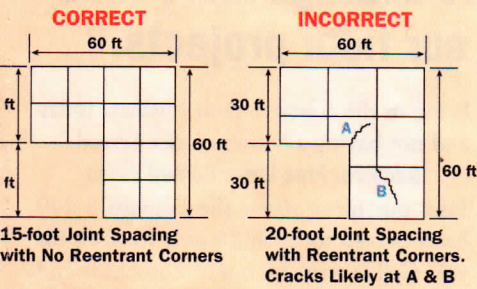


## LAY OUT JOINTS TO

- Divide large floor areas into small rectangular panels, as nearly square as possible
- Limit rectangular panels so the long side is no more than 1½ times the short side
- Avoid reentrant (inside) corners and sharp angles (less than 60 degrees)
- Align with changes in slab thickness, plan dimensions, and joints in adjoining slabs
- Terminate at the edge of the slab, not at an intersecting joint

## CONTROL JOINT SPACING

### Avoid Reentrant (Inside) Corners



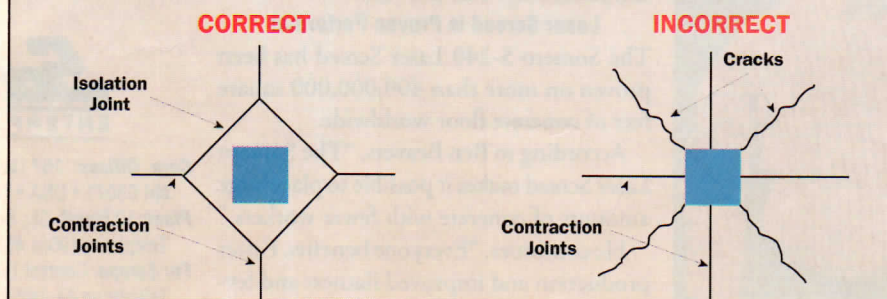
- Should not exceed, in feet, two to three times the slab thickness, in inches

(Example: Space joints 8 to 12 feet apart for a 4-inch-thick slab)

## GOOD JOINTING PRACTICE

- Mark joint locations on edge forms
- Use a straightedge as a joint guide
- Start with a wide groover, then use a narrower groover on later passes
- Cut joints a minimum of ¼ the slab thickness (1 inch deep for a 4-inch slab)

### Use Isolation Joints Around Columns



Concrete Basics are one-page technical notes designed to assist in on-the-job training of workers. A different topic is featured each month. Poster-size copies are available in single or bulk quantities. For more information, call 708-543-0870, ext. 219.