

**No Field Testing Required** – For non-critical and highly redundant applications

- Sidewalk Dowels
- Cored Slab lateral guides
- Dowels for culvert extensions

**Level One Field Testing** -- For non-critical applications

- Post attachment to top of parapet for two bar metal rail
- Attachment of cast-in-place wingwall/headwall/curtain wall to precast culverts
- Horizontal dowels used for bridge widening or staged construction between substructure units or bridge decks
- Rubrail attachment to barrier rail
- Anchor bolts for bearing replacements for rehab work

**Level Two Field Testing** – For critical applications subject to direct traffic loads

- Post attachment to top of parapet for one bar metal rail
- Guardrail attachment to culverts
- Attachment of temporary barrier rails

Do not use Adhesive Bonding Systems for the following applications:

- Overhead applications
- On prestressed members
- Where the edge cover is inadequate to develop the pullout strength
- On very shallow sections of concrete
- Three-bar metal rail post attachments

## **Uses and Field Testing of Adhesive Bonding Systems**

**Figure 12 - 21**