

**Fact Sheet**  
**Nonstructural Measures**  
**(Building Retrofit)**

**Option: Wet Floodproofing**

**Description:** Allowing floodwaters to enter a portion of a structure through use of vents or break-away wall panels. The floodwaters equalize internal and external hydrostatic pressure on the structure foundation. The portion of the structure that will be flooded is typically constructed or retrofitted with materials (such as concrete) that will not be damaged by floodwaters.

**Example(s):** Potential application would be to retrofit a critical public facility such as a fire station garage, subject to limited and low-velocity flooding. Flood louvers shown below.

**Benefits:** Reduces flood risk to structure; may be less costly than other retrofitting methods; does not require additional lot space. Can be applied to a variety of foundation/structure types. Inundation of designated portions of structure reduces the dangers of buoyancy from hydrostatic uplift forces.

**Challenges:** Appropriate only for areas with slow flood velocity (less than three feet-per-second or FPS) and without threat of flash-flooding. Requires use of flood-resistant materials, adjustment of building operation and maintenance procedures, possible relocation or treatment of equipment and utilities and other contents. Will not lower flood insurance rates for residential property. FEMA requires that new or substantially improved residential property in floodplain must be constructed with lowest floor elevated to or above base flood elevation (BFE); thus, this technique is not applicable to new or substantially damaged or substantially improved residential structures.

