

Hopefully some of the answers will help and some will not.

1) **1008.1.8.4** I have had two state reviews which suggest that we cannot use a classroom function deadbolt on a single leaf door. They reference 1008.1.8.4 and state that no manual bolts are allowed.

This issue can be resolved by clearly indicating a classroom lockset and describe the hardware function in detail. I've noticed that some hardware groups noted in project specifications indicate the hardware functions for each hardware group. This clearly provides the plan reviewer the designers intent and use of the hardware. Typically notes stating "deadbolt" or similar language should raise a for the plan reviewer to request more information.

2) **1008.1.8.3** When panic hardware is used on a door from an "H" occupancy, do the subsequent doors in the egress path need to have panic hardware as well?

NO. The example discussed at the DHI meeting April 20, 2007 pertained to a electrical room requiring panic hardware and doors swinging in the direction of egress travel per IBC 1008.1.9. The intent of the provision was to provide safe egress for an individual(s) working in the specific room but not to mandate that all subsequent doors in the egress path be equipped with panic hardware.

3) **1008.1.8.4** Manually operated bolts are allowed on unit entry doors into residential occupancies/unit entry doors. If the unit entry door is fire rated, is the use of manually operated bolts negated? Fire rated doors must be self-closing and self-latching. On typical fire rated pairs of doors we are required to use automatic flush bolts in order to maintain the requirement for self latching and self closing.

Exception 1 of IBC Section 1008.1.8.4 allows manually operated flush bolts or surface bolts on doors of individual dwelling units or sleeping rooms not required for egress. Each dwelling unit or sleeping room will require at least one required egress per IBC Section 1015.1. Doors when used in pairs shall have one leaf providing a 32" minimum clear width for egress per IBC Section 1008.1.1. Fire rated door assemblies must be installed in accordance with their listing requirements and NFPA 80 per IBC Section 715. Technically, pairs of doors for the required egress for an individual dwelling require automatic flush bolts, required fire-resistance rating and required clear width.

Can a building official allow flush bolts on the inactive leaf of a pair of doors for an individual dwelling?

If approved by the local building official he/she could permit a pair of doors with flush bolts on the inactive leaf when the extra leaf is provided for moving large furniture items and provides the required 32" clear opening width for the active leaf. If approved the pair of doors would also have to maintain the fire-resistance rating as designed/listed and he/she may require that no other hardware is installed (i.e. dummy knob or handle) on the door to clearly identify which is the egress door. The building official is not obligated to approve these provisions.

4) Exit and access control doors. We need an expanded understanding.

Maybe we should talk on the phone about this one.

There is little latitude for the code requirements regarding access-controlled egress (magnet locking systems) doors per IBC Section **1008.1.3.4**. It would appear that several magnet locking systems are being installed after the fact based on their popularity, however that

doesn't make them code compliant. The code requires access-controlled egress systems to be used for specified occupancy groups only and comply with the six specific criteria conditions. It would appear that most systems installed probably comply with conditions #2 - #6 but not condition #1. Condition #1 requires doors be provided with sensor to detect an occupant approaching and unlock by a signal from or loss of power to the sensor. I've been informed that some magnetic locking systems will not unlock unless bare hands touch the push bar and systems that immediately relock once the occupant passes through. If these systems are being approved by building officials, I'm uncertain what equivalent measures are being applied for allowed alternate methods and materials permitted by the Minnesota Rule Chapter 1300.0110. Some systems may have been approved with the implementation of backup power, unlocking when activated by sprinkler, smoke detection, heat detection or fire alarm systems.

Minnesota Rule Chapter 1305.1008, Section 1008.1.3.6 was added to address "Special Egress Control Devices" specific to the clinical needs of patients in Group I-1 occupancies (see details). It is possible that some building officials are accepting some of these provisions as alternate method and materials for locking systems.

It would appear that the hardware industry needs to pursue this code requirement at the national level to provide workable code language for all parties involved.