

OSHKOSH

Door Company

TECHNICAL BULLETIN 101-04

WARRANTY EXCLUSION

CORNER MOUNTED AUTOMATIC FLUSH BOLT PREPS CAN REDUCE THE INTEGRITY OF DOOR CORNERS

Certain cutout requirements for corner-mounted automatic flushbolts, severely compromise the integrity of the door. Corner mounted auto bolts often require a pocket in the top and bottom corners of the doors 1" wide, 2" deep and 6"-8" long (SEE FIGURES 1 AND 2). A cutout this size in the corner of the door inevitably results in flaring of the door faces at the corners unless some mechanical means are utilized to hold the corner together (SEE FIGURE 3). This is a direct result of removing the core material needed to maintain structural stability of the door faces at the corner. This condition not only affects the door aesthetically, but may also limit the functionality and longevity of the door. "Flare-out" of as little as 1/16" from the flush bolt will cause improper latching of the bolt. Therefore, flare-out of door corners and any functional problems resulting from hardware preparations requiring removal of core material at door corners, is not considered a manufacturing defect under the manufacturer warranty. Doors installed with hardware preparations requiring removal of core material at door corners, are not covered under our warranty for problems resulting from that removal. There are options available to the specifier which will maintain warranty coverage and insure the aesthetics and functionality of the door. Delamination or breakage due to mishandling at the corner is common and is not considered a manufacturing defect.

The following considerations may be effective specifier or installer options to minimize the adverse effects of this hardware on door construction. Consult the hardware manufacturer for hardware related functions and/or modifications.

1. The use of a metal channel/astragal on door edges, with auto flush bolts requiring corner cutouts, will provide the mechanical means to prevent the flaring of the door faces. The metal channel/astragal may be veneered and finished to match the door face. This is a common solution for negative pressure and non-labeled pairs of doors. If this solution is used in a positive pressure application then a surface mounted intumescent must be applied to the metal channel/astragal or label validity may be affected.
2. There are automatic flush bolt choices that do not require complete core removal at the door corner (SEE FIGURE 4). These bolts do not require the use of metal channels/astragals to maintain the integrity of the door corner. They allow the installation of the intumescent to be concealed in the door edge for positive pressure applications and negative pressure applications where the uses of metal channels/astragals are not desired.
 1. Door Controls International (DCI) 960/962
 2. Hager 296W series
 3. Rockwood 1960/1962

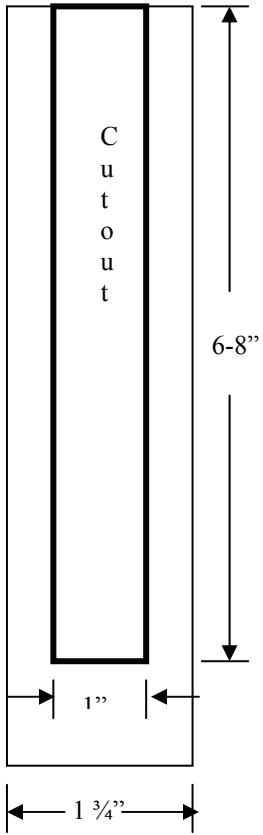


Figure 1
Edge view

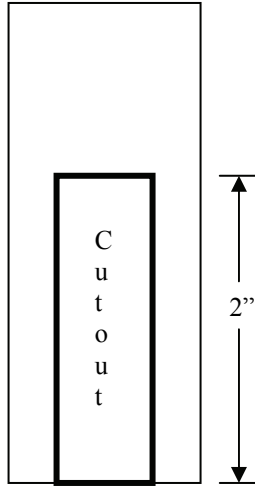


Figure 2
Top view

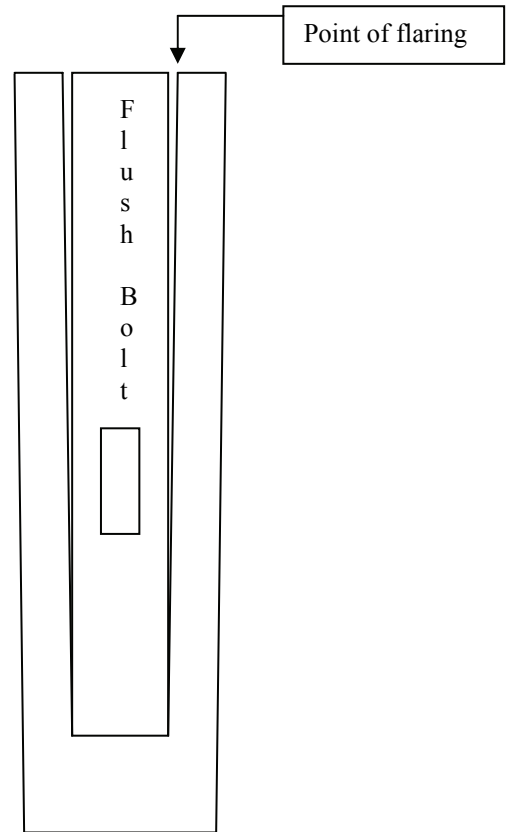


Figure 3
Typical flaring problem with corner mount auto flush bolt requiring complete removal of core at corner.

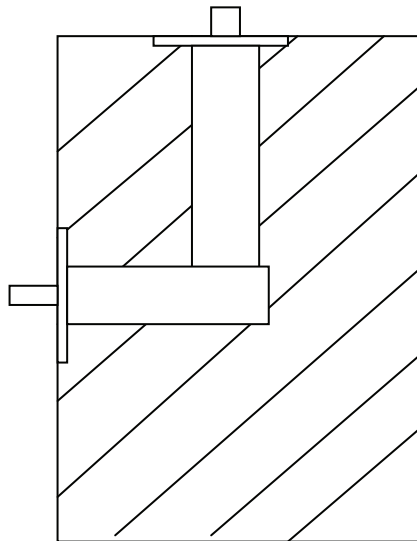


Figure 4
Corner mount auto flush bolt similar to 960, 296W and 1960 models. Maintains the integrity of the door corner.