Installation and Tooling Selection

400 Series and D1800 (NAS 1800) Types

Panel Preparation

The following installation procedure pertains to most Delron potted-in type fasteners. Panels are prepared as illustrated in figures 1 and 2. Drill diameters for various types are shown in the tables below.

Installation Drill Diameters
400 Series

Size	Type H-HE	S-SE	SF-HF
440	.375	.344	-
632	.437	.406	.500
832	.500	.469	.562
1032	.500	.469	.562
428	.562	.531	.687
524	.687	.656	.812
624	.812	.781	.937

D1800 (NAS 1800) Series

Size	D1832, D1833, D1834	D1835	D1836
06	.561-.566	-	.452-.457
08	.561-.566	.686-.691	.452-.457
3	.561-.566	.686-.691	.452-.457
4	.686-.691	.749-.755	.499-.504
5	.686-.691	.811-.817	-
6	.842-.847	.874-.880	-

Bonding Procedure

Most blind applications for potted-in fasteners can use the "Pre-pot" technique. This involves filling the cavity nearly full, giving consideration to the displacement factor of an installed fastener. Sufficient potting material must be used to bond securely yet avoid overflow (Figure 3).

Fastener insertion is very simple using the Series 400 SF and 400S-SE which provide self-retention (Figure 4). Other head styles use tabs to position and hold the fastener in a flush, perpendicular position. Slots or holes in the tabs and insert head, allow additional potting material to be injected into the panel cavity (Figures 5 and 6).

Potting Material

Potting materials suitable for sandwich panel inserts are manufactured by companies such as American Cyanamid, Hexcel, HysolTM™, BASF, Ciba-Geigy, etc. Information on type, setting time, and usage may be secure from them.

Installation Sequence