

## PRODUCT KNOWLEDGE TRAINING

Learn the common features and uses of each product.

### PK DESCRIPTIONS

#### 1. Toggle Bolt



- Used where the back of the wall is inaccessible.
- Works on a spring principle. The holding arms open after the screw and holder are inserted into the hole, gripping the wall as the screw is tightened.
- Select bolts according to the thickness of the diameters from 1/8" to 1/2".
- Fixture to be mounted must be assembled with screw and holder before inserting it into the wall.

#### 2. Molly Bolt



- Also known as an expansion bolt.
- Consists of a screw in a metal sleeve.
- When the sleeve is inserted into a pre-drilled hole and the screw is turned, the sleeve spreads.
- Screw can be removed and inserted in the fixture to be mounted and replaced.

#### 3. Wall Driller Anchor

- For light-duty use on drywall.



- Fastener makes its own hole in the dry-wall.
- Do not use overhead.

#### 4. Plastic Screw Anchor



- Use with wood or sheet metal screws.
- Insert into a pre-drilled hole. User drives the screw through the anchor into the wall.
- Sizes range from 3/4" to 1-3/8" long.
- Another type of plastic anchor functions like a toggle fastener with sizes from 3/4" to 3-1/2".
- Another type pops open and locks into place before the screw is inserted.

#### 5. Self-Tapping Concrete Screw



- Hardened steel screws designed to cut threads in pre-drilled holes.
- Holes can be drilled through the item to be fastened without moving the fixture.
- Head styles are Phillips, fl at or hex-washer.
- Used in poured concrete, concrete block or masonry.
- Pull-out resistance of concrete screws is much greater than in plastic screw anchors because they bite directly into the concrete.

#### 6. Drop-In Anchor



- Expandable concrete anchors set in pre-drilled holes.
- Accepts standard coarse thread bolts or threaded rod.
- Drop-in style anchors do not require patching after sinking.
- Comes in sizes to fit 1/4" to 3/4".

#### 7. Impact-Expansion Concrete Anchor



- Diameter sizes range from 1/4" to 3/4" and lengths from 1-3/4" to 6".
- The drill size used should be the same as the anchor diameter.
- Setting the anchor requires driving the center pin down to the top of the anchor, which expands the sides of the anchor against the walls of the hole.
- The hole can be drilled through the item to be fastened without moving the fixture.
- Anchor can be plated hardened steel or stainless steel.

#### 8. Wedge Anchor



- Has a shank similar to a sleeve anchor—a solid

- shank, threaded at the top and with a cone-shaped plug at the bottom.
- Shank is grooved on opposite sides.
- As the nut on top is tightened, the washer pushes the rectangular shank down and spreads the wedges over the plug.

#### 9. Sleeve Anchor



- Has a steel sleeve on the shank, split at the bottom so it can expand.
- The bolt has a cone-shaped plug at the base and a nut at the top.
- When the user places the anchor in the hole and tightens the nut, it draws the bolt upward, pulling the plug into the sleeve and expanding it against the hole.

#### 10. Lag Screw Shield



- Used inside drilled holes to provide anchors in the hole for lag bolts as they are wrenched into the shield.
- As the screw enters the shield, the shield expands and grips the interior.
- Horizontal fins prevent the shield from turning in the hole while tapered ribs ease insertion and ensure against slips.

STUDY GUIDE **NRHA** Basic Training Course in Hardware Retailing

### 11. Expansion Shield



- Also known as lead shield.
- Used with lag and machine bolts.

- As the bolt is tightened, the cone draws up through a slotted sleeve and expands against the interior of the drilled hole with great force.
- Requires no caulking and is excellent for heavy holding of problem material such as cement, cinder blocks, hollow tile and other concrete mixes.
- Requires a large hole. Use a power drill and masonry bit.
- Use short lengths in good-grade concrete or where thickness limits the length. Use long lengths in poorer-grade concrete where extra anchorage is required.

### 12. Drive Anchor



- Made of high-strength spring steel or of aluminum with a stainless steel pin for use in hard materials.

- Driven into a hole where it is compressed and forced against the walls of the hole.
- Comes in three head styles: round, countersunk and stud. The stud type provides temporary attachment of items that must later be removed.

### OTHER TRAINING TIPS

*Designed to give you confidence on the salesfloor!*

This section is for retail skills training specific to this core product category.

#### FAQs

**Q:** How can I anchor something to concrete?

**A:** A newer anchor has a drill bit built into the end of a screw so that it can be driven directly into the concrete.

**Q:** What can I use to anchor a drapery rod on drywall?

**A:** A plastic anchor will support a lighter rod. Rods supporting heavier weights will need a molly wall grip.

**Q:** How do I install a molly wall grip?

**A:** Drill the proper size hole to insert the molly. Turn the screw head until you feel the molly expand and grip the drywall. Next, remove the screw for intended use. A drive-in type is available that eliminates the need for drilling a hole.

**Q:** How do I install a toggle bolt?

**A:** Drill a proper size hole and insert the bolt. Don't forget that you have to insert the bolt through the item you are fastening to the wall. Collapse the toggle and push the bolt through the hole until the toggle springs open. Now, tighten the bolt to complete the anchoring.

**Q:** I am paneling my basement walls. What nail can I use to anchor furring strips to a concrete block wall?

**A:** Masonry nails can do this job.

**Q:** Is a toggle bolt a good choice for anchoring something to my wall?

**A:** No, toggle bolts are designed for hanging things from a ceiling, where weight is distributed across the toggle. For a wall, it's best to use one of the newer kinds of plastic anchors. One has a self-drilling head that can be driven either with a screwdriver or a power tool.

**Q:** What kind of anchor should I use if I'm framing around a door or window?

**A:** Use a hammer anchor.

**Q:** What kind of anchor should I use if I'm attaching conduit to a foundation wall?

**A:** Use either hammer anchors or a concrete/masonry screw.

**Q:** What kind of anchor should I use to attach machinery to a concrete floor?

**A:** Use a heavy expansion anchor such as a sleeve or wedge anchor.

#### UPSELLING

- The big advantage of concrete screws over hammer anchors is that the screw can be removed and then reinstalled. But remind the customer that he will lose some holding power when the screw is

removed and reinstalled.

- Hammer anchors do not have the strength of larger expansion anchors. However, while hammer anchors are not meant to be removed, you can pry them out if necessary.
- Wedge anchors have maximum holding power in hard concrete.

#### ADD-ON SALES

- Standard Drill Bits
- Masonry Drill Bit
- Safety Glasses
- Gloves
- Bolts
- Screws
- Hammer
- Screwdriver Bit
- Screwdriver Set
- Measuring Tape

#### SAFETY TIPS

- Always use eye protection when drilling a hole in concrete or any type of material to install a masonry anchor. If you are installing an anchor in the ceiling, there is a greater risk of debris falling into the user's eyes.

#### USAGE TIPS

- When installing a masonry anchor, realize that the holding power depends on the quality of the concrete where it is installed.
- If the anchor is placed near the edge of the concrete, or two anchors are placed too close together, the force generated by the



anchor may break the concrete.

- Recommend placing anchors no closer than five diameters from the edge of the concrete. For example: a 1/2" diameter anchor should be no closer than 2-1/2" (1/2" x 5) from the edge of the concrete.
- Never place two anchors closer than 10 diameters from each other. For example: two 1/2" anchors should be at least 5" (1/2" x 5) apart.
- The most important factor to consider when choosing an anchor is how much load it will carry.
- Because of the inexact quality of concrete, recommend that the anchor your customer chooses is rated for about four times the weight it will carry if it will bear a static load (loads that are steady and consistent). Recommend eight times the weight if the anchor will carry a dynamic or impact load (a load that is constantly changing or that will suffer impact).

#### **MERCHANDISING**

- Cross merchandise drill bits with the wall and masonry anchors. Some manufacturer packaging will indicate what size drill bit is needed to install the anchor.
- Cross merchandise driver bits in this category.

