WARNING: EXISTING IN-PLACE RESILIENT FLOOR COVERING AND ASPHALTIC ADHESIVES. DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUTBACK” ADHESIVE, OR OTHER ADHESIVE.

- These existing in-place products may contain asbestos fibers and/or crystalline silica.
- Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard.
- Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm.
- Unless positively certain that the existing in-place product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern removal and disposal of material.

* See current edition of the Resilient Floor Covering Institute (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings for instructions on removing all resilient floor covering structures or contact your retailer or Armstrong Flooring, Inc. 1 800 233 3823.

Installation:

Location: All grade levels
Fitting: All methods

General Information:

The locking installation system allows the planks to be installed without using adhesives. It is a floating floor installation. The planks should be installed 1/4" away from all vertical surfaces such as walls, cabinets, pipes, etc.

When installed in bathrooms, the gap should be filled and sealed with a good quality siliconized or acrylic caulk. The gap can then be covered with molding or wall base. Base cabinets should not be installed on top of the planks.

Keys to Successful Locking Installation:

- Most installations will need approximately a 10% cutting allowance added to the square footage of the room.
- Proper conditioning of the job site is necessary. Flooring planks should not be exposed to sudden changes in temperature.
- Store, transport and handle the flooring planks in a manner to prevent any distortions. Distortions will not disappear over time. Store cartons flat, never on edge. Insure that the flooring planks are lying flat at time of installation.
- Installations of carpet, metal strips and other transition moldings should not push fully into the flooring and should allow for some slight movement wherever practical.
- Protect the floor from heavy-rolling loads, other trades, and movement of appliances by using sheets of plywood or similar.

Suitable Substrates:

All substrates listed below must be properly prepared and meet certain requirements. There may be other exceptions and special conditions (as noted below) for these substrates to be suitable for the locking installation system.

- Concrete — dry and smooth on all grade levels
- Suspended wood subfloors with approved wood underlayments – must have minimum of 18” well-ventilated crawl space underneath.
- Suspended hardwood flooring that is fully adhered, smooth and square edge without texture.
• Single-layer, fully-adhered, existing resilient floors – must not be foam-backed or cushionbacked.
• Ceramic tile, terrazzo, marble
• Polymeric poured (seamless) floors
• OSB-3/4"
• Particleboard 40-lb. density or wafer board

For additional information relative to installation and subfloor preparation please refer to Chapter 3, Subfloors and Underlayments or the Subfloors and Underlayments subsection of the Resilient section on www.floorexpert.com.

**Do Not Install Over:**
• Existing resilient tile floors that are below grade
• Existing cushion-backed vinyl flooring
• Carpet
• Hardwood flooring that has been installed directly over concrete
• On stairs or in rooms with sloping floors or floor drains

**Job Conditions / Preparations:**
• Resilient flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Therefore, the permanent or temporary HVAC system must be in operation before the installation of resilient flooring. Portable heaters are not recommended as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.
• All substrates must be structurally sound, dry, clean, flat and smooth with minimal deflection. Substrates must be free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents, other foreign matter and contaminants.
• Variations in subfloor flatness should not exceed 3/16” in 10’ (4.76 mm in 3.05 m) or 1/8” in 6’ (3.17 mm in 1.83 m). Level floors with a suitable cement-based self-leveling underlayment following the manufacturer’s recommended guidelines.
• Do not use products containing petroleum, solvents or citrus oils to prepare substrates as they can cause staining and expansion of the new flooring.
• For renovation or remodel work, remove any existing adhesive residue so that 100% of the overall area of the original substrate is exposed.
• Embossed existing resilient floors, ceramic tile floors, ceramic and marble grout joints, and irregularities in concrete should be filled and leveled using S-194 Flooring Patch, Underlayment & Embossing Leveler mixed with S-195 Underlayment Additive to fill and smooth any embossing in the old floor.
• The area to receive resilient flooring materials and adhesives should be maintained between 65° F (18° C) and 85° F (29° C) for 48 hours before installation, during installation, and 48 hours after completion. Maintain temperatures between 55° F (13° C) and 85° F (29° C) thereafter.
• For concrete substrates, conduct moisture testing (moisture vapor emission rate [MVER]) not exceeding 5 lbs. and/or percent relative humidity 85% (in-situ probe). Bond tests must also be conducted for compatibility with the substrate. Please refer to the Subfloors and Underlayments Section found on www.floorexpert.com for details.
• Radiant heated substrates must not exceed a maximum surface temperature of 85° F (29° C).
• The subfloor panels must have a smooth, sanded face and show no swelling of edges or surface due to exposure to weather conditions or construction traffic.
• There are numerous products available for use as floor fills, patches, self-leveling underlayments and trowelable underlayments. They include proprietary blends of compounds such as portland cement, calcium aluminates and gypsum-based products. These are recommended by their manufacturers for smoothing rough or uneven

Amstrong Flooring

Chapter 15 — Hybrid Products
subfloors, enhancing acoustical and fire characteristics of structures or as substrates to receive floor covering for otherwise unsuitable subfloor conditions. If the subfloor surface appears to be dusty then apply S-185 to the surface.

Installation Procedure:

Remove baseboard, quarter-round moldings, wall base, appliances and furniture from room. For best results, door trim should be under-cut to allow flooring to move freely without being pinched. After preparation work, sweep and vacuum the entire work area to remove all dust and debris.

Whenever possible, plan the layout so that the joints in the planks do not fall on top of joints or seams in the existing substrate. The end joints of the planks should be staggered a minimum of 6” apart. Do not install over expansion joints. Avoid installing pieces shorter than 8” (20.32 cm).

Determine which direction the plank will run. Find the center of each of the end walls (the walls perpendicular to the long dimension of the planks and place a pencil mark on the floor. Connect these points by striking a chalk line down the center of the room. Do a dry layout of planks from the center line to the wall running parallel to the long direction of the planks to determine the width of the last row of planks (Fig. 1).

Avoid having border pieces less than 3” (7.6 cm) wide for the 6” (15.2 cm) wide planks. If you find the border planks will be less than 1/2 the width of the plank, the center starting line should be shifted a distance equal to 1/2 the plank width. This will “balance” the room and provide for a larger cut piece at the wall.

Fig. 1  Fig. 2

Installation:

Note: The subfloor must be thoroughly free from dust and debris. If the subfloor is dusty this may affect the product performance.

Note: Stagger end joints by 6”. Cut pieces at the ends of rows should be 8” long or longer.

Position the first plank so the grooved edge is facing you (Fig. 2). Install the product from left to right in the room.

Occasionally, it may be necessary to install backwards. This may be done by sliding the grooves under the tongues and working them right to left, but this is more difficult.

Install the second plank in the initial row by angling the end tongue into the end groove of the first plank. Install second and subsequent full pieces in the initial, or first, row by aligning short ends of the planks and locking into place (Fig. 3).

Be careful not to bend the corner of the plank. Be sure to maintain an expansion gap of approximately 1/4” from the wall. Continue installing the first row until you reach the wall on the right.

Begin the second row of planks with the piece cut from the last piece in the first row. If the piece is shorter than 8” (20.32 cm), cut a new plank in half and use it to begin the second row. Whenever practical, use the piece cut from the preceding row to start the next row. End joints of all planks should be staggered 6” or more.
Install the first plank in the second row (and subsequent rows) by inserting the side tongue into the groove of the adjacent plank in the first row (Fig. 4).

Keep this at its natural angle slightly raised off the subfloor. Then angle the short end of the next plank in the row to lock into the previous plank (Fig. 5).

Then align the plank so the long side tongue is positioned just over the groove lip of the adjacent plank in the prior row. Working from the end joint, with a low angle, insert the long side tongue into the groove of the adjoining plank (Fig. 6) until you feel the tongue lock into the groove.

Continue installing planks across a row until you reach the wall on your right.

After the first 3 rows of planks are installed, they should be checked with a string line to ensure that rows are still running straight. If they are not, it could be that the starting wall has some irregularities that caused bowing in the installation. If so, the starting row of planks may have to be scribed and re-trimmed to account for any unevenness in the wall. This can be done without having to disassemble the beginning rows.

Continue installing planks. Maintain a random appearance by offsetting the end joints by least 6”. Always be certain that the planks are fully engaged. If slight gapping is noticed, place a cut piece of flooring (bridge piece) in the side groove that spans the ends of two adjacent planks within a row. Then tap the side of the plank with a tapping block (Fig. 7).

Then, with the bridge piece in place, tap the end of the plank with a pull bar or tapping block (Fig. 8).
When fitting in areas such as door casings, it may be necessary to use a flat pull bar to engage the lock.

Continue installing the remaining rows in similar fashion. For planks, maintain the 6” minimum staggered end joints between rows and for planks maintain the 1/4” gap at perimeter and vertical surfaces.

**Finishing the Installation:**

Replace molding or wall base, allowing slight clearance between the molding and the planks. Nail the molding to the wall surface, not through the flooring. At doorways and at other areas where the flooring planks may meet other flooring surfaces, it is preferable to use a “T” molding, or similar, to cover the exposed edge but not pinch the planks. Leave a small gap between the planks and the adjoining surface.

**Proactive Protection for Your Floor:**

- When moving appliances or heavy furniture, it is always wise to lay a plywood panel, or similar, on your floor and “walk” the item across it. This protects your floor from scuffing, gouging and tears.

- Use floor protectors under furniture to reduce indentation. As a general rule of thumb, the heavier the item, the wider the floor protector needed.

- Place a walk-off mat at outside entrances to reduce the amount of dirt brought into your home. We strongly recommend mats without a latex or rubber backing since these backings can cause permanent discoloration.

- All Armstrong Flooring floor care products have been specifically developed to care for Armstrong® floors.

**Caring for Your Floor:**

- Sweep or vacuum regularly, to remove loose dirt which can scratch your floor. Note: *We do not recommend vacuums that have a beater bar since it can visibly damage your flooring surface. Additionally, we do not recommend electric brooms with hard plastic bottoms with no padding as use may result in discoloration and deglossing.*

- Wipe up spills as soon as possible. Never use highly abrasive scrubbing tools on any resilient floor.

- Wash your floor regularly with a vinyl floor cleaner such as Armstrong Flooring Once 'n Done® Floor Cleaner.

- Do NOT use detergents, abrasive cleaners, or “mop and shine” products. These products may leave a dull film on your floor.

- Over time, if the shine on your floor begins to dull, apply Armstrong Flooring SatinKeeper® floor finish.
Chapter 15 — Hybrid Products

THANK YOU FOR CHOOSING ARMSTRONG FLOORING. When properly installed and cared for, your new flooring will be easy to maintain and will keep its great look for years. If you have questions or comments, please visit us at www.ArmstrongFlooring.com or 1 800 233 3823.

WARNING: EXISTING IN-PLACE RESILIENT FLOOR COVERING AND ASPHALTIC ADHESIVES. DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUTBACK” ADHESIVE, OR OTHER ADHESIVE.

• These existing in-place products may contain asbestos fibers and/or crystalline silica.
• Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard.
• Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm.
• Unless positively certain that the existing in-place product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern removal and disposal of material.

* See current edition of the Resilient Floor Covering Institute (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings for instructions on removing all resilient floor covering structures or contact your retailer or Armstrong Flooring, Inc. 1 800 233 3823.

Installation:
Location: All grade levels
Fitting: All methods

General Information:
The locking installation system allows the planks to be installed without using adhesives. It is a floating floor installation. The planks should be installed 1/4” away from all vertical surfaces such as walls, cabinets, pipes, etc.
When installed in bathrooms, the gap should be filled and sealed with a good quality siliconized or acrylic caulk. The gap can then be covered with molding or wall base. Base cabinets should not be installed on top of the planks.

Keys to Successful Locking Installation:
• Most installations will need approximately a 10% cutting allowance added to the square footage of the room.
• Proper conditioning of the job site is necessary. Flooring planks should not be exposed to sudden changes in temperature.
• Store, transport and handle the flooring planks in a manner to prevent any distortions. Distortions will not disappear over time. Store cartons flat, never on edge. Insure that the flooring planks are lying flat at time of installation.
• Installations of carpet, metal strips and other transition moldings should not push fully into the flooring and should allow for some slight movement wherever practical.
• Protect the floor from heavy-rolling loads, other trades and movement of appliances by using sheets of plywood or similar.

Suitable Substrates:
All substrates listed below must be properly prepared and meet certain requirements. There may be other exceptions and special conditions (as noted below) for these substrates to be suitable for the locking installation system.
• Concrete — dry and smooth on all grade levels
• Suspended wood subfloors with approved wood underlayments — must have minimum of 18” well-ventilated crawl space underneath
• Suspended hardwood flooring that is fully adhered, smooth and square edge without texture
• Single-layer, fully-adhered, existing resilient floors — must not be foam-backed or cushionbacked
• Ceramic tile, terrazzo, marble
• Polymeric poured (seamless) floors
• OSB-3/4”
• Particleboard 40-lb. density or waferboard

For additional information relative to installation and subfloor preparation please refer to Chapter 3, Subfloors and Underlayments or the Subfloors and Underlayments subsection of the Resilient section on www.floorexpert.com.

Do Not Install Over:
• Existing resilient tile floors that are below grade
• Existing cushion-backed vinyl flooring
• Carpet
• Hardwood flooring that has been installed directly over concrete
• On stairs or in rooms with sloping floors or floor drains

Job Conditions/Preparations:
• Resilient flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Therefore, the permanent or temporary HVAC system must be in operation before the installation of resilient flooring. Portable heaters are not recommended as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.
• All substrates must be structurally sound, dry, clean, flat and smooth with minimal deflection. Substrates must be free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents, other foreign matter and contaminants.
• Variations in subfloor flatness should not exceed 3/16” in 10’ (4.76 mm in 3.05 m) or 1/8” in 6’ (3.17 mm in 1.83 m). Level floors with a suitable cement-based self-leveling underlayment following the manufacturer’s recommended guidelines.
• Do not use products containing petroleum, solvents or citrus oils to prepare substrates as they can cause staining and expansion of the new flooring.
• For renovation or remodel work, remove any existing adhesive residue so that 100% of the overall area of the original substrate is exposed.
• Embossed existing resilient floors, ceramic tile floors, ceramic and marble grout joints, and irregularities in concrete should be filled and leveled using S-194 Patch, Underlayment & Embossing Leveler mixed with S-195 Underlayment Additive to fill and smooth any embossing in the old floor.
• The area to receive resilient flooring materials and adhesives should be maintained between 65° F (18° C) and 85° F (29° C) for 48 hours before installation, during installation, and 48 hours after completion. Maintain temperatures between 55° F (13° C) and 85° F (29° C) thereafter.
• For concrete substrates, conduct moisture testing (moisture vapor emission rate [MVER]) not to exceed 5 lbs. and/or percent relative humidity 85% (in-situ probe). Bond tests must also be conducted for compatibility with the substrate. Please refer to the Subfloors and Underlayments Section found on www.floorexpert.com for details.
• Radiant heated substrates must not exceed a maximum surface temperature of 85° F (29° C).
• The subfloor panels must have a smooth, sanded face and show no swelling of edges or surface due to exposure to weather conditions or construction traffic.
• There are numerous products available for use as floor fills, patches, self-leveling underlayments and trowelable underlayments. They include proprietary blends of compounds such as portland cement, calcium aluminates, and gypsum-based products. These are recommended by their manufacturers for smoothing rough or uneven subfloors, enhancing acoustical and fire characteristics of structures or as substrates to receive floor covering for otherwise unsuitable subfloor conditions. If the subfloor surface appears to be dusty then apply S-185 to the surface.

**Installation Preparation:**

Remove baseboard, quarter-round moldings, wall base, appliances and furniture from room. For best results, door trim should be under-cut to allow flooring to move freely without being pinched. After preparation work, sweep and vacuum the entire work area to remove all dust and debris.

Whenever possible, plan the layout so that the joints in the planks do not fall on top of joints or seams in the existing substrate. The end joints of the planks should be staggered a minimum of 6" apart. Do not install over expansion joints. Avoid installing pieces shorter than 8" (20.32 cm).

Determine which direction the plank will run. Find the center of each of the end walls (the walls perpendicular to the long dimension of the planks and place a pencil mark on the floor. Connect these points by striking a chalk line down the center of the room. Do a dry layout of planks from the center line to the wall running parallel to the long direction of the planks to determine the width of the last row of planks (Fig. 1).

Avoid having border pieces less than 3" (7.6 cm) wide for the 6" (15.2 cm) wide planks. If you find the border planks will be less than 1/2 the width of the plank, the center starting line should be shifted a distance equal to 1/2 the plank width. This will “balance” the room and provide for a larger cut piece at the wall.

**Installation:**

**Note:** The subfloor must be thoroughly free from dust and debris. If the subfloor is dusty this may affect the product performance.

**Note:** Stagger end joints by 6”. Cut pieces at the ends of rows should be 8” long or longer.

Position the first plank so that grooved edge is facing you. Install the product from left to right in the room (Fig. 2).

Occasionally, it may be necessary to install backwards. This may be done by sliding the grooves under the tongues and working them right to left, but this is more difficult.

Install the second plank in the initial row by angling the end tongue into the end groove of the first plank. Install second and subsequent full pieces in the initial, or first, row by aligning short ends of the planks and locking into place (Fig. 3).
Be careful not to bend the corner of the plank. Be sure to maintain an expansion gap of approximately 1/4” from the wall. Continue installing the first row until you reach the wall on the right.

Begin the second row of planks with the piece cut from the last piece in the first row. If the piece is shorter than 8” (20.32 cm), cut a new plank in half and use it to begin the second row. Whenever practical, use the piece cut from the preceding row to start the next row. End joints of all planks should be staggered 6” or more.

Install the first plank in the second row (and subsequent rows) by inserting the side tongue into the groove of the adjacent plank in the first row (Fig. 4).

Keep this at its natural angle slightly raised off the subfloor. Then angle the short end of the next plank in the row to lock into the previous plank (Fig. 5).

Then align the plank so the long side tongue is positioned just over the groove lip of the adjacent plank in the prior row. Working from the end joint, with a low angle, insert the long tongue into the groove of the adjoining plank until you feel the tongue lock into the groove.

Continue installing planks across a row until you reach the wall on your right.

After the first 3 rows of planks are installed, they should be checked with a string line to ensure that rows are still running straight. If they are not, it could be that the starting wall has some irregularities that caused bowing in the installation. If so, the starting row
of planks may have to be scribed and re-trimmed to account for any unevenness in the wall. This can be done without having to disassemble the beginning rows.

Continue installing planks. Maintain a random appearance by offsetting the end joints by least 6”. Always be certain that the planks are fully engaged. If slight gapping is noticed, place a cut piece of flooring (bridge piece) in the side groove that spans the ends of two adjacent planks within a row. Then tap the side of the plank with a tapping block.

When fitting in areas such as door casings it may be necessary to use a flat pull bar to engage the lock.

Continue installing the remaining rows in similar fashion. For planks, maintain the 6” minimum staggered end joints between rows and for planks maintain the 1/4” gap at perimeter and vertical surfaces.

**Finishing the Installation:**

Replace molding or wall base, allowing slight clearance between the molding and the planks. Nail the molding to the wall surface, not through the flooring. At doorways and at other areas where the flooring planks may meet other flooring surfaces, it is preferable to use a “T” molding, or similar, to cover the exposed edge but not pinch the planks. Leave a small gap between the planks and the adjoining surface.

**Proactive Protection for Your Floor:**

- When moving appliances or heavy furniture it is always wise to lay a plywood panel, or similar, on your floor and “walk” the item across it. This protects your floor from scuffing, gouging and tears.
- Use floor protectors under furniture to reduce indentation. As a general rule of thumb, the heavier the item, the wider the floor protector needed.
- Place a walk-off mat at outside entrances to reduce the amount of dirt brought into your home. We strongly recommend mats without a latex or rubber backing since these backings can cause permanent discoloration.
- All Armstrong Flooring floor care products have been specifically developed to care for Armstrong® floors.

**Caring for Your Floor:**

- Sweep or vacuum regularly, to remove loose dirt which can scratch your floor. **Note: We do not recommend vacuums that have a beater bar since it can visibly damage your flooring surface. Additionally, we do not recommend electric brooms with hard plastic bottoms with no padding as use may result in discoloration and deglossing.**
- Wipe up spills as soon as possible. Never use highly abrasive scrubbing tools on any resilient floor.
- Wash your floor regularly with a vinyl floor cleaner such as Armstrong Flooring Once ‘n Done® Floor Cleaner.
- Do NOT use detergents, abrasive cleaners, or “mop and shine” products. These products may leave a dull film on your floor.
- Over time, if the shine on your floor begins to dull, apply Armstrong Flooring SatinKeeper® Resilient Low Gloss Floor Finish to restore the appearance of Luxe Plank. Do NOT use paste wax or solvent based polishes.
- Vinyl flooring, like other types of smooth floors, can become slippery when wet. Allow time for floor to dry after washing. Immediately wipe up wet areas from spills, foreign substance, or wet feet.

**Repair Procedure:**

For detailed repairs, please log on to www.floorexpert.com.
<table>
<thead>
<tr>
<th>Pattern Number</th>
<th>Design Name</th>
<th>Color Name</th>
<th>Piece Height (mm)</th>
<th>Piece Width (mm)</th>
<th>Piece Length (mm)</th>
<th>Piece Width (In.)</th>
<th>Piece Length (In.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC001</td>
<td>Salvaged Plank</td>
<td>White</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
<tr>
<td>PC002</td>
<td>Vintage Chestnut</td>
<td>Antique Natural</td>
<td>6.5</td>
<td>145</td>
<td>1,208</td>
<td>5.7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC003</td>
<td>Antiqued Oak</td>
<td>Natural</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC004</td>
<td>Artisan Floorboard</td>
<td>Light Brown</td>
<td>6.5</td>
<td>145</td>
<td>1,208</td>
<td>5.7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC005</td>
<td>Native Acacia</td>
<td>Golden</td>
<td>6.5</td>
<td>145</td>
<td>1,208</td>
<td>5.7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC006</td>
<td>Tree line Hickory</td>
<td>Amber</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC007</td>
<td>Maritime</td>
<td>Weathered Gray</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC008</td>
<td>Gray’s Beach</td>
<td>Driftwood</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
<tr>
<td>PC009</td>
<td>Exotic Woodgrain</td>
<td>Reclamed Gray</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC010</td>
<td>Coastal Concrete</td>
<td>Seascap Gray</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC011</td>
<td>Azure Sea</td>
<td>Blue Gray</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC012</td>
<td>Waterfront</td>
<td>Sky Blue</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC013</td>
<td>Waterfront</td>
<td>Pier Brown</td>
<td>6.5</td>
<td>128</td>
<td>1,208</td>
<td>5</td>
<td>47.56</td>
</tr>
<tr>
<td>PC014</td>
<td>Brushed Oak</td>
<td>Tan</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
<tr>
<td>PC015</td>
<td>Brushed Oak</td>
<td>Brown</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
<tr>
<td>PC016</td>
<td>Brushed Oak</td>
<td>Gray</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
<tr>
<td>PC017</td>
<td>Forest Treasure</td>
<td>White</td>
<td>6.5</td>
<td>145</td>
<td>1,208</td>
<td>5.7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC018</td>
<td>Forest Treasure</td>
<td>Gray</td>
<td>6.5</td>
<td>145</td>
<td>1,208</td>
<td>5.7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC019</td>
<td>Forest Treasure</td>
<td>Brown</td>
<td>6.5</td>
<td>145</td>
<td>1,208</td>
<td>5.7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC020</td>
<td>Elements of Heritage</td>
<td>Vintage Multi</td>
<td>6.5</td>
<td>110/ 144/ 178</td>
<td>1,208</td>
<td>4.3/ 5.6/ 7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC021</td>
<td>Elements of Heritage</td>
<td>Vintage Cool White</td>
<td>6.5</td>
<td>110/ 144/ 178</td>
<td>1,208</td>
<td>4.3/ 5.6/ 7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC022</td>
<td>Elements of Heritage</td>
<td>Vintage Heartland</td>
<td>6.5</td>
<td>110/ 144/ 178</td>
<td>1,208</td>
<td>4.3/ 5.6/ 7</td>
<td>47.56</td>
</tr>
<tr>
<td>PC023</td>
<td>Harvest Fest</td>
<td>Mushroom</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
<tr>
<td>PC024</td>
<td>Textured Timbers</td>
<td>Gray Brown</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
<tr>
<td>PC025</td>
<td>Textured Timbers</td>
<td>Smokey Brown</td>
<td>6.5</td>
<td>167</td>
<td>1,208</td>
<td>6.6</td>
<td>47.56</td>
</tr>
</tbody>
</table>

**Special Precautions and Recommendations:**

1. Armstrong® PRYZM Flooring may be installed in residential full bathrooms following the guidelines outlined in the Bathroom Installation Section I (Chapter 16).
2. PRYZM Flooring is not recommended over carpets or in high-humidity areas where the floor is normally wet—e.g., steam rooms or saunas.
3. Level floors with a suitable cement-based self-leveling underlayment following the manufacturer’s recommended guidelines.
4. Radiant heated subfloors should not exceed 85°F (29°C).
5. Full Bathroom Installations—100% silicone caulk must be used around the entire perimeter. Bathroom installation is for residential use only.
6. Leave PRYZM flooring in the sealed cartons prior to Installation. Seal any cartons that will sit overnight.
7. How to Install 3” 5” 7” Varied Width:

![When installing this multi-width product, a 5” wide plank MUST be used in every other row. This sequence must be followed throughout the entire installation.](image)
A. TOOLS AND MATERIALS

- PRYZM Flooring
- Polyethylene Tape
- Armstrong® EverSeal Adhesive
- Hammer
- Tapping Block
- Utility Knife
- Pull Bar
- Safety Glasses
- Spacers
- NIOSH-Designated Dust Mask
- Flooring Coordinated Transitions & Molding Pieces
- Saw (see optional tools)
- Carpenter’s Square
- Touch-Up Kit / Filler
- Tape Measure
- 100% Silicone Caulk
  (for bathroom & high moisture installations)

B. OPTIONAL TOOLS AND MATERIALS

- Router
- Jigsaw
- Drill
- Undercut Saw
- Saws
- Dividers
- Table Saw
- Chalk Line
- Miter Saw
- Circular Saw
- Hand Saw
- Pocket Plane
- Armstrong® Hardwood & Laminate Floor Cleaner (S-302)

WARNING: EXISTING IN-PLACE RESILIENT FLOOR COVERING AND ASPHALTIC ADHESIVES. DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUTBACK” ADHESIVE, OR OTHER ADHESIVE.

- These existing in-place products may contain asbestos fibers and/or crystalline silica.
- Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard.
- Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm.
- Unless positively certain that the existing in-place product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern removal and disposal of material.

* See current edition of the Resilient Floor Covering Institute (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings for instructions on removing all resilient floor covering structures or contact your retailer or Armstrong Flooring, Inc. 1 800 233 3823.

C. INTRODUCTION

1. Floating Floor Structure

a. PRYZM Flooring is considered a “floating” floor and is installed using a floating floor system. These floors are intended for indoor use only and can be installed over virtually any existing floor structure, they will expand and contract with changes in relative humidity. In Light Commercial installations where the relative humidity cannot be controlled and excessive low humidity is common, the use of T-Moldings or wider molding systems is required.

b. Not attach to the subfloor at any point, unless a full spread glue down option is desired.

c. Do not fit flush against any fixed vertical surfaces like walls, pipes, passageways or staircases.
d. Humidity must be maintained between 35% and 70%. A minimum 1/4” (6.35 mm) to 1/2” (12.7 mm) expansion zone is required around the perimeter of the room as well as against any fixed objects. This zone accounts for the normal movement of the floor system.

e. Where the room is larger than 40’ (12.19 m) but less than 80’ (24.38 m) in plank length or wider than 26’ (7.92 m) but less than 52’ (15.85 m) in plank width, a minimum of 1/2” (12.7 mm) expansion zone is required around the perimeter of the room as well as against any fixed objects.

f. Temperature changes will have little effect on the movement of these floors.

g. The number of square feet of PRYZM flooring required is not equal to the number of square feet in the area of the room because the PRYZM flooring must be fit to walls and objects. An approximate cutting allowance of 10% for wood visuals must be added to the square footage estimate.

2. Armstrong Flooring EverSeal Flooring Adhesive
   a. Specifically designed to create a strong, water-resistant bond between the tongue and groove.
   b. The integrity of the floor installation depends on the use of the appropriate glue, the amount of glue and the proper installation techniques.
   c. Easy cleanup.
   d. Coverage for using flooring glue: up to 150 sq. ft. (500 lin. ft.)/16 ounce bottle.

D. SUBFLOOR REQUIREMENTS

Armstrong® PRYZM Flooring can be installed over most subfloors and existing floors on all grade levels.

All substrates must:
- Meet applicable building codes
- Be structurally sound
- Show minimal deflection
- Be dry, clean and flat

1. Precautions
   a. PRYZM Flooring may be installed in bathrooms following the guidelines outlined in the Bathroom Installation Section H.
   b. The slope should not exceed 1” in 6’ (2.54 cm in 1.83 m).
   c. Variations in subfloor flatness should not exceed 3/16” in 10’ (4.76 mm in 3.05 m) or 1/8” in 6’ (3.17 mm in 1.83 m). Level floors with a suitable cement-based self-leveling underlayment following the manufacturer’s recommended guidelines.
   d. Radiant heated subfloors should not exceed 85° F (29˚ C).

2. Concrete Subfloors
   a. Concrete floors must be cured properly and allowed to dry for at least 60 days after the curing process.
   b. Concrete floors must not show any signs of moisture or alkali.

   **NOTE: The following tests are required in commercial applications. Either or both tests are acceptable.**
   c. Calcium Chloride Test (ASTM F1869): The maximum moisture transfer must not exceed 8 lbs./1000 sq. ft. in 24 hrs.
   d. RH Levels in Concrete Using In-situ Probes (ASTM F2170) should not exceed 90%.
   e. Over concrete subfloors we recommend using 6 mil polyfilm moisture barrier. If excessive moisture, over 90% RH, is present or if slab moisture cannot be verified, the use of a 6 mil polyfilm moisture barrier is required. The moisture barrier should be overlapped six inches and taped at the seams.
3. Wood Subfloors
   a. Wood subfloors must be suspended and have a minimum of 18" (45.7 cm) of well-ventilated crawl space.
   b. Regardless of grade level, do not install over wood subfloors applied directly to concrete or on sleepers over concrete.
   c. Installation of a 6 mil minimum polyethylene film vapor barrier over the ground in the crawl space is recommended if areas with excessive moisture over 90% RH. The polyethylene film acts as a moisture barrier when seams are taped together with polyethylene tape.

4. Underlayment Boards
   a. PRYZM Flooring can be installed over any wood, cement or gypsum-based underlayment boards that are installed according to the manufacturer’s recommended guidelines.

5. Wood Flooring
   a. All wood flooring must be dry, level, flat and installed over suspended subfloors.
   b. The wood subflooring materials must not exceed 15% moisture content. Using a reliable wood moisture meter, measure the moisture content of the subfloor.
   c. Sand any ridges or uneven portions and repair squeaks.
   d. Install Armstrong® PRYZM Flooring at a 90° angle to existing wood plank flooring.
   e. Flooring over concrete must be removed.

6. Ceramic and Resilient Tile
   a. Tile installed over concrete:
      All grout joints and broken corners that exceed 3/16" (5 mm) must be filled with a cementitious leveling compound such as S-194 Flooring Patch, Underlayment & Embossing Leveler with S-195 Flooring Underlayment Additive. The surface should be cleaned and abraded to create a good bonding surface for the adhesive. Loose tiles must be re-adhered to the subfloor or filled as above. Remove all sealers and surface treatments. Always check for adequate adhesive bond.
   b. Tile installed over wood:
      All grout joints and broken corners that exceed 3/16" (5 mm) must be filled with a cementitious leveling compound such as S-194 Flooring Patch, Underlayment & Embossing Leveler with S-195 Flooring Underlayment Additive. The surface should be cleaned and abraded to create a good bonding surface for the adhesive. Loose tiles must be re-adhered to the subfloor or filled as above. Remove all sealers and surface treatments. Always check for adequate adhesive bond.

7. Vinyl Sheet
   a. Vinyl sheet installed over concrete:
      No additional underlayment is needed for PRYZM with attached backing.
   b. Vinyl sheet installed over wood:
      No additional underlayment is needed for PRYZM with attached backing.
E. ROOM PREPARATION

1. Conditioning
   a. PRYZM floors do not require acclimation, depending on storage conditions; it is advised that the product being installed be within the same temperature range of the room during service conditions.
   b. Relative humidity must be maintained between 35% and 70%.
   c. The room temperature should be at a minimum of 45° F for 48 hours before, during and for 48 hours after installation.
   d. During and after installation, the room temperature should not exceed a maximum of 95° F (35° C).
   e. If the above conditions cannot be met a 4 hour acclimation period is required.

2. Preparation
   a. Removal of existing wall base, millwork or trim is optional.
   b. Door trims and doorjambs must be undercut to allow the floor to move freely. Use a discarded piece of floor to support the saw blade at the correct height for undercutting (Fig.1).
   c. Sweep the subfloor and remove all dust and debris.
   d. If the drywall is slightly elevated at the floor and wall juncture, create a solid wall surface by fastening a 2”–3” (5 cm to 7.6 cm) wide facing strip (such as 1/4” (6.35 mm) plywood) to the wall at the stud location.
   e. New wall base or molding must be installed at the end of the job to cover the 1/4” (6.35 mm) to 1/2” (12.7 mm) expansion zone around the perimeter of the floor. The wall base or molding coverage should be equal to the 1/4” or 1/2” expansion zone, especially in dry conditions.
   f. It may be necessary to plane or cut the bottom of the door to accommodate the change in floor height.
   g. Handle and unload with care. Store in a dry place, being sure to provide at least a 4” air space under cartons which are stored upon “on-grade” concrete floors. Flooring should not be delivered until the building has been enclosed with windows, doors are in place and cement work, plastering and all other “wet” work is completed and dry.
   h. Although it is not necessary to acclimate PRYZM flooring, prior to the installation it is best to store it in the environment in which it is expected to perform. If room temperature is outside of the 45°–95° F range, then you must acclimate PRYZM for 4 hours prior to installation. Keep the PRYZM flooring in the sealed cartons. Check adhesive label for adhesive storage limitations.

3. Layout
   Install parallel to incoming light from any windows or, if lighting is not a concern, parallel to the longest wall in the room (Fig.2).
4. High Moisture Areas

It is a good idea to use 100% silicone caulk in areas of rooms where excessive moisture may be present, such as at kitchen sinks, dishwashers and ice makers. See Bathroom Installation section for instructions on Full Bathroom Installations Section H.

5. Installing Cabinets

a. Install cabinets and then PRYZM around the cabinets, leaving the 1/4” (6.35 mm) to 1/2” (12.7 mm) expansion zone.

b. If installing cabinets after the PRYZM has been installed, most or all of the cabinet weight should be supported by the wall mountings. To secure the cabinets to the substrate with screws or nails, drill holes through the PRYZM 1/2” (12.7 mm) diameter larger than the screw or nail to allow for expansion.

6. Installing Kitchen Islands

a. The island must be freestanding and weigh less than 250 lbs. if it is to be installed over the PRYZM.

b. If the island weighs more than 250 lbs., the PRYZM flooring is to be installed around the island, allowing the normal 1/4” (6.35 mm) to 1/2” (12.7 mm) expansion area around the base of the island.

c. If the PRYZM already been installed, and the island must be installed over the PRYZM, and the island weighs more than the 250 lb. maximum, drill holes through the PRYZM 1/2” (12.7 mm) diameter larger than the bolts (to allow for expansion) and bolt the island to the subfloor.

7. General Installation Tips

If possible, remove all wall mounted moldings such as base and quarter-round.

NOTE: DO NOT INSTALL FLOORING USING RUBBER MALLETS. STRIKING THE SURFACE WITH A RUBBER MALLET MAY “BURN” THE FINISH, CAUSING IRREPARABLE DAMAGE.

8. Getting Started: All Installations

Always check each plank for damage before installing.

a. Avoid narrow pieces at the finish wall. Measure the distance between the starting wall and the finish wall.

b. Divide this number by the width of the board.

c. If the remainder is less than 2-1/2” (6.35 cm), cut off 2-1/2” (6.35 cm) from the width of the first row or (to balance the room) add the difference to the plank width and divide by two. To minimize pattern repeats in the floor, always pull from at least 3 cartons of flooring while installing.

9. Wall Irregularities

All wall irregularities require cutting the first or last row of boards to fit the contour of the wall

a. Use dividers or a 1” (2.54 cm) spacer turned sideways to mark the contour (Fig. 3).
b. Cut to shape.
c. Position the cut piece, using the pull bar to tighten the last piece in place.
d. Place a spacer between the end of the board and the side wall.
e. Two tapered spacers can be used as wedges to accommodate irregular walls (Fig. 4).

![Fig. 3](image1.png) ![Fig. 4](image2.png)

10. Cutting
   a. A good quality carbide-tipped cutting blade.
   b. When using a hand saw, cut with the decorative side of the board facing up
   c. When using power saws, the direction of blade must cut into the decorative side of the board to minimize chipping.
   d. Use a square to keep your cut line straight.
   e. Cut the marked piece in another area to keep the sawdust away from the installation site.

11. Installing Under a Door Jamb or Toe Kick (all Installations)
   Installation of locking PRYZM flooring through a door jamb or under a toe kick requires the lip of the groove to be reduced in size.
   a. Using a small plane or utility knife, plane or shave off 75% of the ledge of the groove.
   b. Be careful not to trim too much. Excessive reduction can weaken the joint
   c. After the groove ledge has been trimmed, place the board in position laterally and lightly pull the board into place using the pull bar.
   d. Sometimes, more than one passing may be necessary in order to trim the ledge of the groove to the correct height.
   e. Joint should be tight with no movement; however, a thin 3/32" (2.4 mm) bead of glue on top of tongue only should be used at this juncture to ensure joint integrity.

12. Finishing the Installation (All Installations)
   a. Remove spacers and install molding pieces. (See Coordinated Transitions and Molding Pieces Section I.)
   b. Always predrill transitions or moldings prior to nailing. To allow the floating floor to move freely, do not fasten the trim to the PRYZM flooring.
   c. For routine cleaning, vacuum or damp mop. To remove excessive dirt buildup, use Armstrong Flooring Hardwood & Laminate Floor Cleaner (S-302).
   d. DO NOT WAX OR POLISH your floor.
F. ANGLE/ANGLE LOCK, LOCKING PRYZM PLANKS—WOOD VISUALS

1. Installing the First Row
   a. Begin on the left side of the room and work right.
   b. Lay the first full piece with the small, tongue side facing the wall.
   c. Install second and subsequent full pieces in the first row by aligning short ends of boards and locking into place.
   d. Use spacers along all sides that butt up against walls to maintain 1/4" (6.35 mm) to 1/2" (12.7 mm) expansion zone.
   e. Continue laying boards in the first row until you need to cut the last piece.
   f. Measure the distance between the wall and the face surface of the last board. Subtract 1/4" (6.35 mm) and cut the board. (See cutting instructions above.)
   g. If this distance is less than 8" (20.32 cm) go back to the first full plank and cut approximately 8" (20.32 cm) from the end closest to the starting wall. This will leave a longer piece at the end of the first row.

2. Installing Remaining Rows
   a. Begin the second row of planks with the piece cut from the last piece in the first row. If the piece is shorter than 8" (20.32 cm), cut a new plank in half and use it to begin the second row. Whenever practical, use the piece cut from the preceding row to start the next row. End joints of all boards should be staggered 8" (20.32 cm) or more. Grout lines on planks with tile visuals can be aligned, or off-set as long as end joints are staggered.
   b. Install the long end of the first board at an angle to the board in the previous row. Keep this board at its natural angle slightly raised off the subfloor. Use a scrap piece of PRYZM to support the row if needed.
   c. Continue installing full boards in the second row by angling the short end of the next board in the row to lock into the previous board. Position the board so that the long side of the board is close to boards in the previous row and overlapping the groove of the boards in the previous row.
   d. Angle up and push forward until the boards lock together.
   e. Continue installing full boards in the second and subsequent rows until you reach the wall on your right.
   f. Mark the last piece, cut and install. After all boards in the row are installed, press or walk all boards flat to the subfloor to begin the next row. A tapping block may be used to fully engage the planks.
   g. Use a pull bar when necessary to ensure joints are tight.

3. Installing the Last Row
   a. The last row in the installation may need to be cut lengthwise.
   b. Place the row of planks to be fit on top of the last row of installed planks. Use a divider or a piece of the plank as a scribe to trace the contour of the wall.
   c. Be sure to place a spacer between the marking pen and “scribe” piece of board. This adds the 1/4" (6.35 mm) to 1/2" (12.7 mm) space you need at the finish wall.
   d. Mark where the board should be cut.
   e. If the fit at the finish wall is simple and straight, just measure for the correct width and cut.
   f. After the last row is installed, use the pull bar to tighten the joints.
   g. When appropriate, cut the underlayment even with the top of the floor.
   h. Install the long end of the first board in the second row at an angle to the board in the first row. Press flat to subfloor to lock into place.
   i. Angle the long end of the next board in the second row to lock into the first row while positioning the short end of the board over the groove from the previous board. Lock and fold into place.
   j. Follow the order described above to continue laying the boards in the second and additional rows.
k. Use a pull bar if necessary to tighten joints.

G. FULL BATHROOM INSTALLATION RECOMMENDATIONS FOR LOCKING PRYZM

1. All perimeter expansion zones must be completely filled with 100% silicone caulk following the manufacturer’s recommendations. When applying caulk, it is helpful to first apply a strip of masking tape parallel to and approximately 1/32” (.79 mm) from the edge of the PRYZM flooring. Then fill the expansion zone with caulk, remove the excess with a plastic scraper or putty knife and remove the tape.

2. Molding may be used along a straight tub or shower base. The expansion zone should be filled with 100% silicone caulk and the molding seated in the caulk while it is still wet. The joint between the molding and the tub or shower base should also be caulked. If molding is not an option, a normal 1/4” (6.35 mm) expansion zone may be used at the tub and then completely filled with 100% silicone caulk.

3. The toilet should be removed before installing the PRYZM flooring. Allow a 1/4” (6.35 mm) expansion zone between the PRYZM flooring edge and the toilet flange. Completely seal the zone with 100% silicone caulk.

4. As with any hard-surfac ed material, PRYZM flooring can be slippery when wet.

H. COORDINATED TRANSITIONS AND MOLDING PIECES

Armstrong Flooring offers specially designed End Cap, Multi-Purpose Reducer, and Overlap Stair Nosing to complete the floor installation.

1. Attach any of these pieces with nails (6d finish nails) or construction adhesive. When using construction adhesive, weigh down the transition strip evenly to ensure proper contact with the subfloor. Do not use an excessive amount of construction adhesive that could ooze out and fill the expansion zone.

2. To allow the floating floor to move freely, never fasten the transition pieces to the flooring.

3. Keep the placement of the transition strip such that the 1/4” (6.35 mm) expansion around the perimeter is maintained.

4. When installing over a radiant heated floor, always use construction adhesive to attach transition pieces.

5. Always pre-drill any of these pieces with the appropriate size drill bit to avoid cracking or splitting the strip.

6. To prevent wood core from being exposed, add a “return” to the ends of molding at outside corners; for inside corners miter at a 45° angle if corner is square or use a cope saw if corner is not square.

7. Multi-Purpose Reducer
   Provides a smooth transition from your PRYZM flooring to another type of flooring of a lower height. Also finishes the space where PRYZM flooring ends against a vertical surface and where quarter-rounds cannot be used.

I. SPECIAL CUTTING PROCEDURES

1. Irregular-Shaped Pieces
   Make a paper pattern for irregular-shaped pieces, and transfer the pattern to the piece to be cut.

2. Holes for Pipes
   a. In placing the hole on the end of the piece PRYZM measure and drill a hole that is 1/2” (12.7 mm) larger in diameter than the pipe.
   b. Cut across the piece through the center of the hole.
   c. Glue the edge of the end piece.
   d. Use the pull bar to put the piece in place.
   e. Use spacers as wedges to hold in place.
   f. In placing the hole on the long side of the piece of PRYZM, mark and drill a hole that is 1/2” (12.7 mm) larger in diameter than the pipe.
g. Cut in from the edge at a 45° angle toward the holes in the piece.

h. Apply glue to the cut edges.

i. Use the pull bar to put the piece in place.

j. Use spacers as wedges to hold in place.

**J. REPAIRING LOCKING PRYZM**

1. **Minor Repairs**

   Minor chips or scratches can easily be repaired using a color-matched Armstrong Flooring Touch-Up Kit or Filler Kit for floors.

2. **Major Repairs — Close to a Parallel Wall**

   a. In case of a major problem with the locking system, it is possible to replace an entire piece of the flooring. In most cases, just remove the molding from the walls nearest the damaged board (Fig. 5).
b. Remove the boards by unlocking them (Fig. 6). Number the boards, on the back, so they may be repositioned later. You can work in either direction, carefully working back to the damaged piece.

c. Replace the damaged board with a new one. Reassemble the floor (Fig. 7).

3. Major Repairs — In Center of Room (Repair is Permanent)
   a. Check replacement board for damage, size and fit.
   b. Mark damaged board 1-1/2" (3.81 cm) from ends and sides. Drill 3/16" (4.76 mm) holes in corners and at relief cuts (Fig. 8).
c. Set saw depth to board thickness. Cut along lines and remove center section. Make relief cuts using drilled holes as visible stop.

d. Carefully lift and pull center length cut first, then work into corners to remove end pieces last.

e. If the floor was installed with Armstrong® Everseal, clean factory edges using a sharp chisel. Remove glue from top of groove using a tongue and groove cleaner tool or a small piece of PRYZM with tongue edge.

f. Prepare replacement board by removing bottom of groove on end and side (Fig. 9).

g. Carefully remove tongue from end of board with sharp utility knife.

h. Clean area thoroughly and test fit. Check for high edges and adjust fit using 120-grit sandpaper.

i. Apply Armstrong® Everseal Flooring Adhesive to top of tongue and bottom of groove.

j. Carefully place the new piece into the opening. Press firmly.

k. Remove all residual glue on the surface with a clean, damp cloth.

l. Make sure all edges are even on either side of the joints. Apply pressure for at least 24 hours using heavy weights.

m. Make sure that the weight is evenly distributed across the new piece.
EverSeal Flooring Adhesive—Hardwood/Laminate

**CAUTION**

EVERSEAL EYE AND SKIN IRRITANT

For use with the following Installation Systems:
- Residential PRYZM Flooring
- Light Commercial PRYZM Flooring
- Commercial PRYZM Flooring

**DESCRIPTION:**

<table>
<thead>
<tr>
<th>Type:</th>
<th>Polyvinyl acetate cross-linking emulsion (water-based)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>White when wet; dries opaque in 1 hour; contains no visible taggants</td>
</tr>
<tr>
<td>Taggants:</td>
<td>None</td>
</tr>
<tr>
<td>Applicator:</td>
<td>Predrilled cap on 16 oz. bottle</td>
</tr>
<tr>
<td>Spread Rate:</td>
<td>3/32&quot; (2.4 mm) bead up to 150 sq. ft. (500 lin. ft.)/ 16 oz. bottle</td>
</tr>
<tr>
<td>Units:</td>
<td>16 oz. bottle (473 ml); 12 bottles/ctn.; weight 14.4 lb./ctn.</td>
</tr>
<tr>
<td>Shelf Life:</td>
<td>1 year, unopened</td>
</tr>
<tr>
<td>Freeze/Thaw Stable:</td>
<td>Keep from freezing</td>
</tr>
<tr>
<td>VOC Content:</td>
<td>25 g/L; calculated and reported, SCAQMD 1168</td>
</tr>
<tr>
<td>Clean Up:</td>
<td>Wet: clean, white cloth dampened with warm water.</td>
</tr>
<tr>
<td></td>
<td>Dry: can be easily peeled away; remove residue/haze with cloth dampened 8 oz. (1 cup) white distilled vinegar to 1 gal. water (1:16 ratio)</td>
</tr>
<tr>
<td>Subfloors:</td>
<td>All grade levels of concrete, existing resilient floors, ceramic, terrazzo, marble, steel, stainless steel, aluminum, polymeric poured floors and suspended wood</td>
</tr>
<tr>
<td>Advantages:</td>
<td>Nonflammable</td>
</tr>
<tr>
<td></td>
<td>Easy clean up</td>
</tr>
<tr>
<td></td>
<td>Designed to create a strong water resistant bond between tongue and groove; use for laminate installations full bathrooms, high moisture areas, and light commercial environments</td>
</tr>
</tbody>
</table>

Chapter 15 — Hybrid Products