



## Installation instructions for DEKOR™ Railing Kits

Each and every project is unique. These instructions are given as known approaches and general guidelines to installing our product. Your project may dictate an entirely different installation approach, that's what makes your project unique.

### Before you start:

- Read and understand the instructions completely.
- Assemble all tools required prior to starting installation
- If installing illuminated products make sure that electrical current is turned off before connecting any wires or connectors.
- If you have any doubts about how to install an illuminated product or you do not fully understand the instructions, please contact DEKOR™. Customer Service @ 1-800-258-0344

### Tools required for installation:

- Power Drill Motor
- DEKOR™ Drill Kt (includes Forstner bit and hole template) template is designed to be used with dimensional composite/wood only.  
Use Forstner bit only, if drill template is not compatible with your rail material
- Rubber Mallet

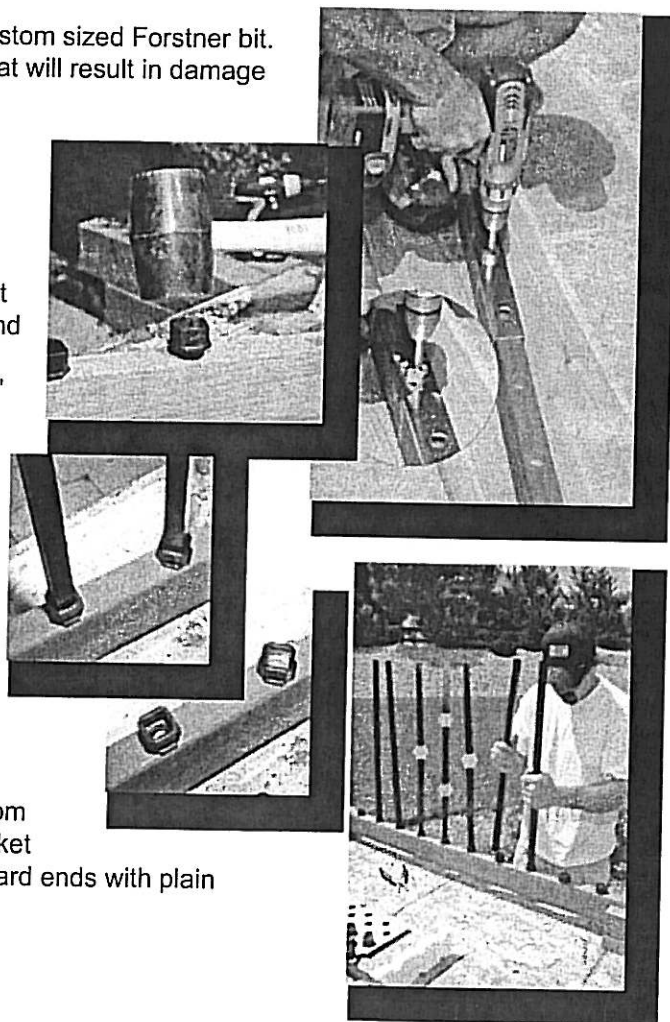
### If installing illuminated product, add:

- Router or Table saw to cut channel in top and/or bottom rails
- Pliers
- Wire Strippers
- Screwdriver to attach leads to DEKOR™ power transformer
- DEKOR™ 18 gauge outdoor rated two conductor wire
- DEKOR™ water resistant wire nuts

### Installation of Traditional Rail Kit:

**Note:** Our product is designed to be installed using our custom sized Forstner bit. Using other bits will result in either a loose fit or too tight that will result in damage during installation.

1. Prior to drilling holes in top and bottom rails for the end caps, find center of section. Start with either the top or the bottom rail. The DEKOR™ hole template is designed for dimensional composite/wood, spacing the balusters on 4 5/8" centers required for code compliance. After drilling first hole, slip template into hole and repeat until holes reach end of section. You can reduce the center to center distance to fit your specific rail length but you cannot exceed the 4 5/8" on center spacing.
2. Repeat for other rail.
3. Once holes are drilled, place end caps into holes and tap secure with rubber mallet. Caution: Using a metal hammer or other blunt instrument will damage the powder coating and is not covered under warranty. If installing square balusters, rotating the end cap 90 degrees will change the appearance of your project. Choose which look you desire.
4. Lay bottom rail on flat surface and insert balusters into bottom end caps. Be sure to start at the center with the double basket and then place single baskets on either side. Work out toward ends with plain balusters until all caps are full.



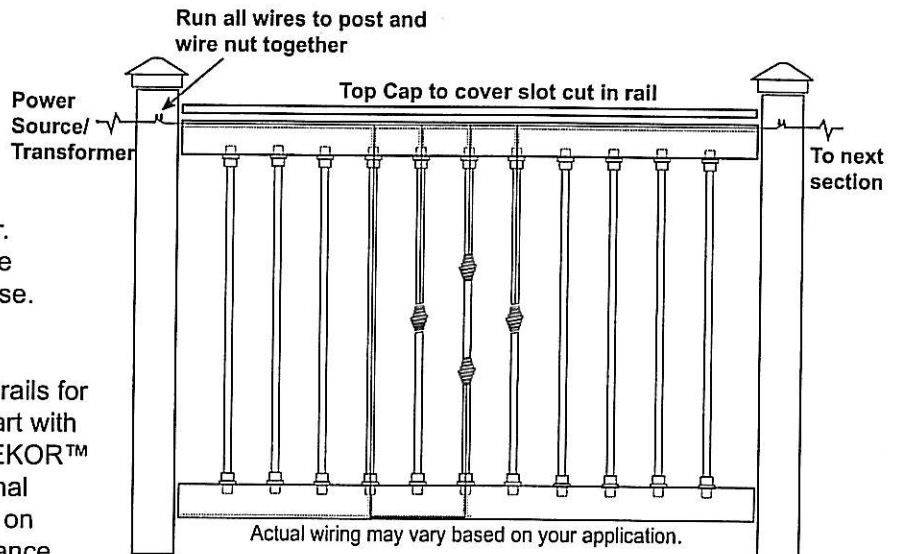
- Carefully align top rail with end caps and slip onto balusters. Secure top and bottom rails with tie-downs or other method to keep section intact.
- Carefully lift section into place between posts. We recommend setting section on blocks prior to attaching rails to posts. (See local codes for proper height of bottom rail).
- Secure rail section to posts.



## Installation of Illuminated Rail Kit:

**Note:** Our product is designed to be installed using our custom sized Forstner bit. Using other bits will result in either a loose fit or one that can damage the product during installation. DEKOR™ Illuminated products are only warranted when used with a DEKOR supplied transformer. Installation of this wiring approach uses the same methods as when wiring in the house.

## Sample Wiring Diagram for Illuminated Balusters



- Prior to drilling holes in top and bottom rails for the end caps, find center of section. Start with either the top or the bottom rail. The DEKOR™ hole template is designed for dimensional composite/wood, spacing the balusters on 4 5/8" centers required for code compliance. After drilling the first hole, slip template into hole and repeat until holes reach end of section. You can reduce the center to center distance to fit your specific rail length but you cannot exceed the 4 5/8" on center spacing.
- Repeat for other rail.
- Once holes are drilled into the bottom of the top rail, cut a 1/4" x 1/4" slot across the entire top section of rail or on underside of cap rail. If using hollow composite products this slot is not required. (Note: When installing center double basket baluster with two lights, repeat slot on bottom of bottom rail.)
- Determine which holes will be used for illuminated balusters and drill 3/16" hole through center of hole made by Forstner bit. Hole should intersect 1/4" slot. (Repeat for bottom section for center double basket baluster.)
- Take illuminated baluster and run wire through end cap and then through hole in top (or bottom) rail. Gently place end caps into holes making sure not to pinch wire and make sure end cap is fit snug into hole. Tape wire in bundle so they are not in your way assembling the sections together.
- Lay bottom rail on flat surface and insert balusters into bottom end caps. Be sure to start at the center with the double basket and then place single baskets on either side. Work out to ends with plain balusters until all end caps are full.
- Carefully align top rail with end caps and slip onto balusters. Secure top and bottom rails with tie-downs or other method to keep section in tact.



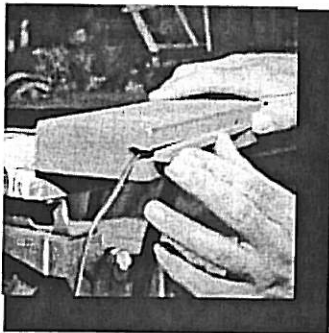
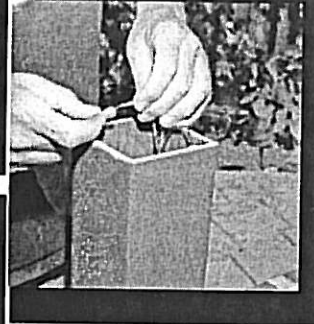
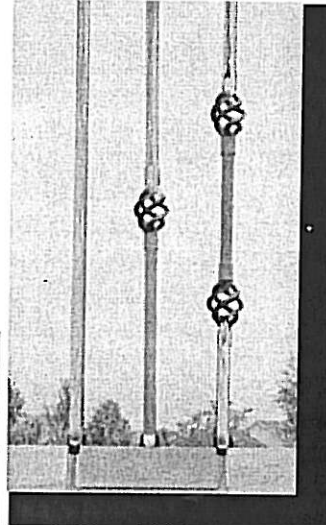
Determine which direction/post you are routing the wire to and tape the wires to the top rail in that direction.

8. Measure where 1/4" slot will intersect post and drill 3/8" holes into post where top and bottom rails will meet so that wires can be inserted into post cavity.
9. Carefully lift section into place between posts. We recommend setting section on blocks prior to attaching rails to posts. (See local codes for proper height of bottom rail). Gently feed wire into post. Then secure rails making sure you do not pinch or clip any wires.
10. Connect wires together inside post cavity using IC connectors. Be sure that all black wires connect to black wires and all red wires connect to red wires. If post is the termination of lights and you are going to connect to the transformer, leave enough lead wire to reach transformer. You must use an approved DEKOR™ transformer to operate DEKOR™ Illuminated products. Test section before moving on to next.

11. Run power wires to next post to repeat procedure for next rail section.

12. Finish top rail board.

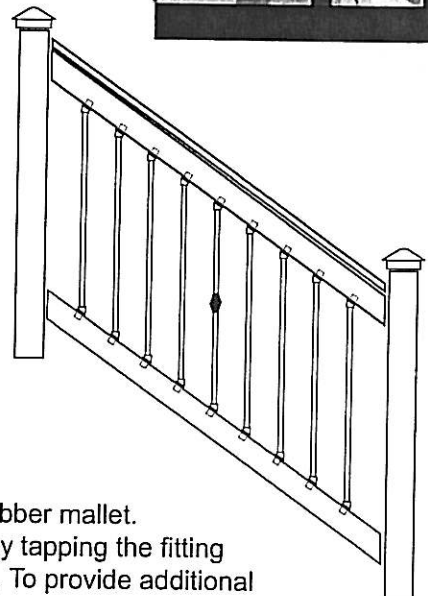
13. Fabricate trim plug to hide bottom wires if desired.



NOTE: When using hollow composite material, run wiring through hollow space. A trough or slot is not needed.

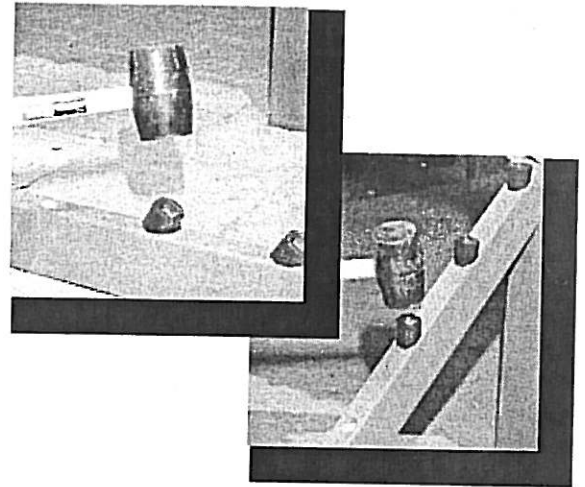
### Installation of Non- Illuminated Stair Rail Kit:

1. Prior to drilling holes in top and bottom rails for the end caps, find center of section. Start with either the top or the bottom rail. Space holes on 6" centers which will give code compliance spacing.
2. Stair fittings are designed to be inserted in Forstner drilled perpendicular holes to rail face. Holes can be drilled with rails in place or resting on a flat surface. A flat surface is preferred so that drilling perpendicular is more easily accomplished and you have the reinforcement of the surface when applying drill pressure. You can reduce the spacing to your specific stair length just don't exceed 6" spacing.
3. Once holes are drilled place stair end caps into holes and tap secure with rubber mallet. Fittings are designed for 35° stair rise but can easily be changed to 33-37° by tapping the fitting in the desired direction allowing the back side knife edge to cut into your rail. To provide additional



securing, if desired, the hole in the center of the fitting will accommodate wood screws.

- Secure bottom rail to posts and insert balusters into bottom stair end caps. Place single basket balusters where desired in rail section.
- Carefully align top rail with stair end caps in place and slip onto balusters. Secure top rail to post and finish handrail as desired.



### Installation of Illuminated Stair Rail Kit:

**NOTE:** Your lighted stair rail kit includes single lighted basket balusters resulting in wires running in top rail only within a 1/4" x 1/4" slot as described earlier.

- Repeat step 1-2 above.
- Once holes are drilled into the bottom of the top rail, cut a 1/4" x 1/4" slot across the entire top section of rail or on underside of cap rail. If using hollow composite products this slot is not required. (Note: When installing center double basket baluster with two lights, repeat slot on bottom of bottom rail.)
- Determine which holes will be used for illuminated balusters and drill 3/16" hole through center of hole made by Forstner bit. Hole should intersect 1/4" slot.
- Secure bottom rail to posts and insert stair end caps (see step 3 above) and balusters into bottom rail. Place single lighted basket balusters where desired within rail section.
- Route illuminated baluster wire through stair end cap and then through hole in top rail. Tape wire in bundle so they are not in your way assembling the sections together.
- Secure top rail to posts.
- Connect wires together inside post cavity using IC connectors. Be sure that all black wires connect to black wires and all red wires connect to red wires. If post is the termination of lights and you are going to connect to the transformer, leave enough lead wire to reach transformer. You must use an approved DEKOR™ transformer to operate DEKOR™ illuminated products.
- Run power wires to next post to repeat procedure for next rail section.
- Finish top rail board.

### Sample Wiring Diagram for Illuminated Stair Balusters

