

## Installation, Operation + Maintenance Manual

# RUBBER COATED HEAVY-DUTY SYSTEM – SURFACE APPLICATION MODEL(S): RCP

### RCP Floor to Floor System - Up to a 31" Seismic Max. Opening



#### **GENERAL DESCRIPTION**

Nystrom RCP series Rubber Coated Heavy-Duty Hinge System is rated for low speed vehicular traffic but is also commonly used on pedestrian walkways.

**GENERAL SAFETY PRECAUTIONS** Improper selection, installation, or use can cause personal injury or property damage. It is solely the responsibility of the user, through their own analysis, to select products suitable to the specific application requirements, ensure proper maintenance and use as intended. Follow local, state, and federal regulations for proper installation and operation requirements.

#### Introduction + Safety

Please read the complete instructions carefully before beginning any work. To ensure proper installation and performance of the product, the following actions must be completed by the installing contractor. Failure to do so will affect the product warranty.

#### **Transportation + Storage**

- Inspect all shipments and materials for missing or damaged components and hardware.
- o Material must be stored in a clean, dry location.

#### **Preparation**

- Locate the packing slip(s) and/or shop drawings.
- Verify that all products listed on the packing slip are included in the package.
- Check the products for damage. If products are damaged, report a freight claim immediately and leave the products in their packaging. If you sign for products without reporting damage, you waive your right to a freight claim and will be responsible for their replacement cost.
- Read the instructions thoroughly before beginning installation.

#### **Tool List**

- Tape measure
- Chop saw to cut product to length
- Electric drill with Ø1/8", Ø5/16", Ø5/32" masonry bit & T-50 Torx Ø3/8" metal bit
- Broom & dustpan or vacuum
- Level
- Silicone sealant

#### Included with the expansion joint system:

- Ø10mm x 70mm Lg. concrete screw
- Ø10mm drill bit

#### Option(s) available for the expansion joint system:

- End caps for all sizes
- Ø1/4" x 3-7/8" Lg. Hilti HSL-3 SK 8/20 anchors (when jurisdictions require)
- Additional Color(s): Gray

#### **Preinstallation**

1. Ensure the area where the expansion joint system is being installed (including the blockout area) is smooth and level. High spots should be ground down and low spots filled in. Make sure the substrate is clean by sweeping and/or vacuuming substrate.

#### **INSTALLATION**

If not able to level out the joint opening, fasten EJN-RCP cover plate along the high side of
the opening. If installing more than one piece, lay out entire run to ensure proper
alignment. If a section of the Nystrom EJN-RCP cover plate has been cut, apply a bead of
sealant along the cut edge of the cover plate to prevent the steel insert from rusting. See
Figure 1.

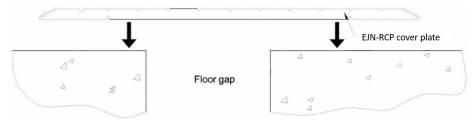


Figure #1

2. Drill end holes first. This ensures the expansion joint will not move and alignment with other joints is obtained. Follow anchor manufacturers recommendations for drilling operation. Drill Ø10mm holes to proper depth and clean holes. Note: Refer to Hilti's website for manufacturer's recommendations for fastening. See Figure 2.

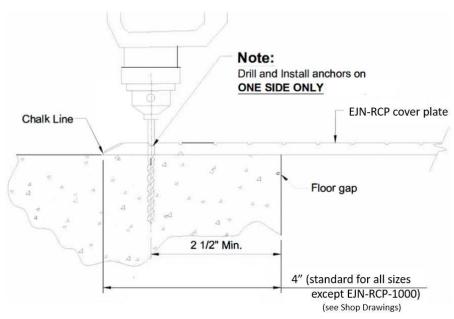


Figure #2

3. To allow for thermal expansion of the EPDM rubber cover, leave a 1/8" (approximate) gap between EJN-RCP cover plate sections. See Figure 3.

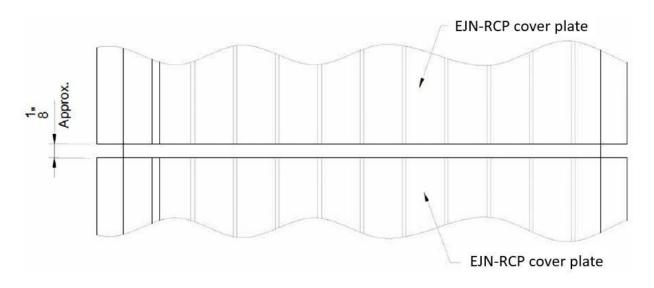


Figure #3

4. Follow anchor manufacturer's recommendations for proper anchor installation. Once anchors are in the end holes, drill remaining 16" O.C. and install anchors. Slight compression of EPDM cover will occur when the threaded concrete anchor is tightened down. See Figure 4.

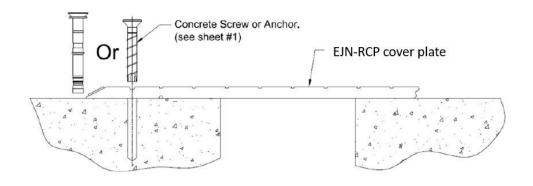


Figure #4

5. For a wall termination, use a heavy-duty saw (Worm Gear type recommended) with cutting blade for steel to cut the EJN-RCP cover plate. Leave about a 1/16" (approximate) gap between the cover plate and the wall. Fill the 1/16" gap with a bead of silicone sealant (by others). **See Figure 5.** 

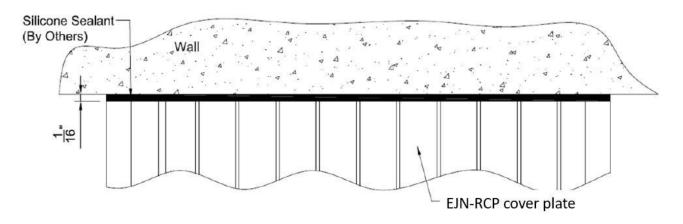


Figure #5

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6. **For End Cap use (Optional)** – Apply a bead of clear silicone (by others) in the end cap cavity and squeeze the end cap onto the cut face of the EJN-RCP cover plate. **See Figure 6.** 

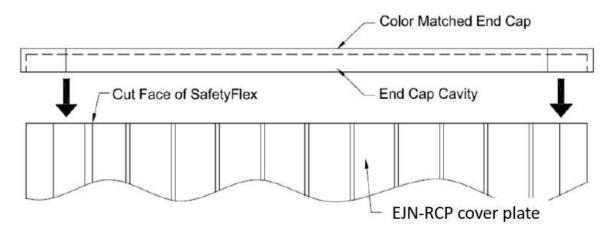
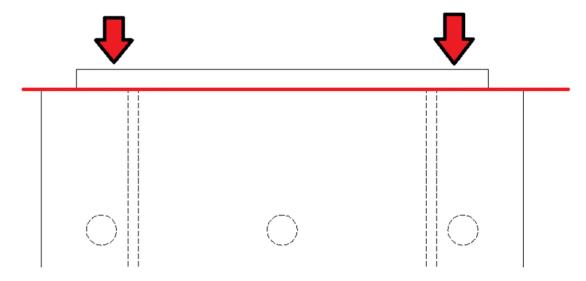


Figure #6

7. **Finished Edges** – Every EJN-RCP cover plate comes with a "tongue" on one end and a "groove" on the other. The steps for having a "finished edge" (as shown below) are as follows.



8. **Finished Edges (cont'd)**– Using a sliding compound miter/tile saw, cut off the "tongue" end (area shown above the red line below) at required bevel angle. Lubricate if necessary. Result should be as shown in Step #7 above.



#### **OPERATION**

Expansion Joints are designed and built for years of dependable service.

#### **MAINTENANCE**

Perform annual inspections to make sure the system is in position; all fasteners are tight and in place and that there is no impedance of joint cover movement. Repair and/or replace as needed.

#### **QUESTIONS?**

For more information on installation, repair, or replacement, please contact Customer & Sales Support at 800-547-2635 or visit <a href="mailto:nystrom.com">nystrom.com</a>