

Installation Guidelines: Straight and Corrugated HC-Omega® on Grade

Training:

Upon request PSCS provides training services. Our team can assist your crew in the installation of the armored free movement joints providing recommendations for the layout, detailing, and best practices. If your project needs specialized attention, our associates can provide recommendations on a case by case basis.



Figure 1. Straight HC-Omega as installed on grade.

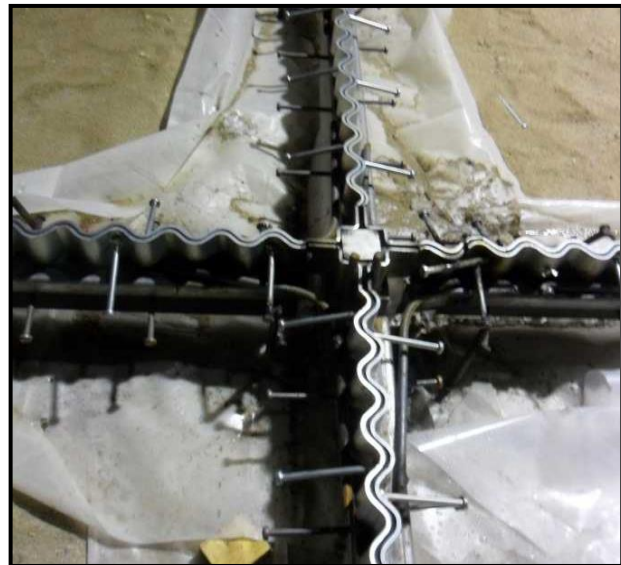


Figure 2. Corrugated HC-Omega® crossing as installed on grade.

Guidelines:

1. String a line where the profiles are to be installed.
2. Lay the joints out along this line.
3. Place the first joint parallel to this line.
4. Bring them to the correct height using wedges or the height adjustment tool.
5. Hammer or drill stakes into the ground vertically near the ends of the Nelson Studs on both sides of the joint and both ends of the joint. See stakes in Figure 1. welded to the Nelson Studs.
6. Place another set of stakes at the middle of the joint.
7. Check the height level of the profile with a laser and check the alignment relative to the taut line.
8. Use a level to check the levelness of the profile across the length.
9. Weld the pins to the Nelson Studs. If welding work is not permitted on site, special adjustment feet are available.
10. Place the next profile with its overlap in the first profile. With the second profile matching the first profile, the start of next profile is immediately at the correct height.

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11. Bring the end of the second profile to the correct height with wedges or the height adjustment tool.
12. Weld the two joint sections together on the side of the top flange and the bottom flange.
13. Repeat these steps 5 to 12 until an intersection, wall or column is reached.
14. If the slab reinforcing is rebar or wire mesh, be careful not to weld the slab reinforcing steel or wire mesh to the armor joint. The joint must expand and contract with the concrete not the steel. If the joint is welded to the reinforcing steel, the slab will not perform optimally.

For intersections:

1. Place the intersection in the location specified on the layout plan.
2. Measure the distance between the last placed joint and the intersection. Cut the joint to be placed to the correct length using a cutting disc.
3. Place the joint that has been cut to length according to the procedure described above.
4. Bring the intersection to the correct level and weld it to the joint. Remember to weld the supplied noses on to prevent the penetration of poured concrete into the joint.

Tools & Supplies:

1. Welding team.
2. Portable self-contained welding machine such as the “Blue Star® 185” by Miller or equivalent.
3. Pneumatic hammer for driving in rebar stakes to stabilize joints. See Figure 1.
4. Quickie saw for cutting the joints and rebar as needed.
5. Crossings for intersections or qualified trainers to assist with the installation.
6. Adjustable feet for easy height adjustment or Wood wedges for levelling and adjusting height or The Height Adjustment and Levelling Tool.
7. String for making a straight guide line.

Disclaimer: All of these guidelines are for general information only. Please contact our representatives for further inquiries.