



Core Drill and Saw Cut Installation

Westfield Fashion Square

Sherman Oaks, CA.

January, 2012



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Figure 1: Main Entrance of Westfield Fashion Square



Figure 2: Initial Plan for Crosswalk Boundaries (Red Bricks Outline Crosswalk)



Figure 3: Expanded Crosswalk Boundaries (Stop Lines Mark the New Boundaries)



Figure 4: Expanded Crosswalk Boundaries (Stop Lines Mark New Boundaries)

Core Drill and Saw Cut Installation



Figure 5: Macy's Entrance to Westfield Fashion Square



Figure 6: Ramp to Second Level Presented A Crosswalk Visibility Issue



Figure 7: Solution - Crosswalk Location Shifted for Clear Visibility of Warning Lights

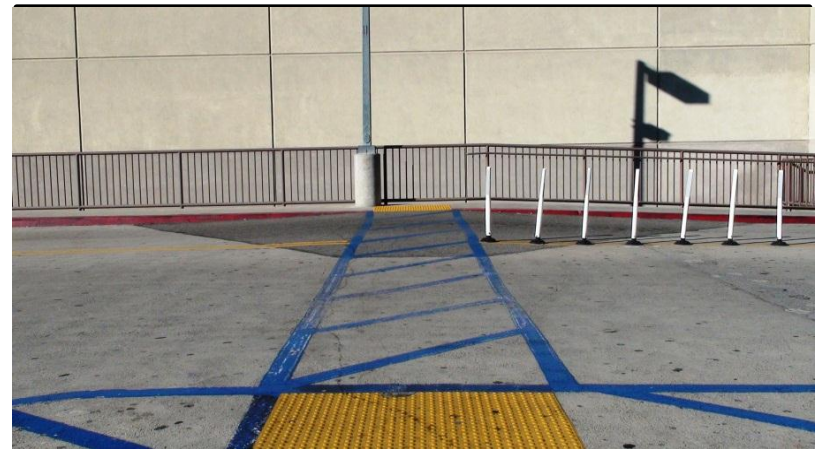


Figure 8: Close-up View of Crosswalk

Core Drill and Saw Cut Installation



Figure 9: First Order of Business – Locate All Utilities and Mark with APWA Color Code, Red = Power Line



Figure 10: APWA Color Code, Blue = Water Line



Figure 11: APWA Color Code, Yellow = Gas Line, Companies Such as “DIG ALERT” and “Underground Service Alert” can Locate all Utility Lines



Figure 12: APWA Color Code, Orange = Data/Phone Line

Core Drill and Saw Cut Installation



Figure 13: Once Fixture Locations are Defined Saw Cuts for In-pavement Wiring Can be Made



Figure 14: The Saw Cuts Continue Across the Length of the Crosswalk, Crossing all Fixture Locations

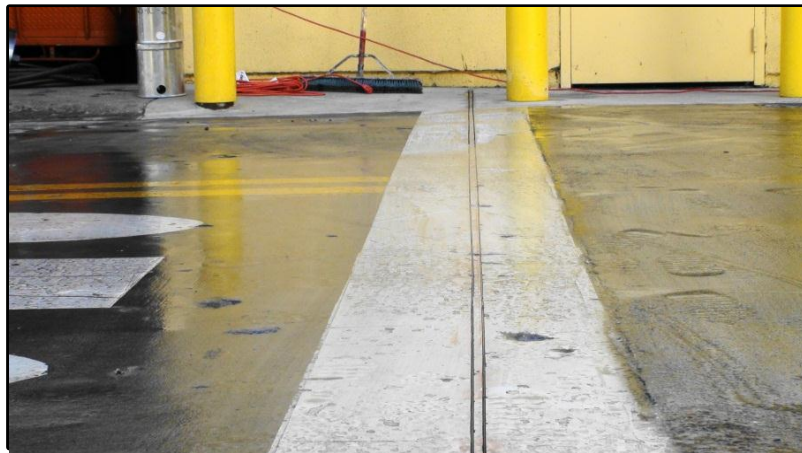


Figure 15: When Completed, A Set of Parallel Lines Mark Out A Path Connecting All Fixtures



Figure 16: A Channel, Approximately $\frac{1}{2}$ " Wide and 3" Deep is then Chiseled Away between the Saw Cuts

Core Drill and Saw Cut Installation



Figure 17: The Next Step in the Process is the Core Drill



Figure 18: At Each Fixture Location a Core Drill is Made. Cores are Approximately 12" Dia. X 28" Deep



Figure 19: Into Each Hole, a Base Can is Mounted. The Base Can is Used to Stabilize and Protect the Fixture



Figure 20: Once the Holes are Drilled, Gravel is Placed at the Bottom of Each Hole to Provide a Drainage Area

Core Drill and Saw Cut Installation



Figure 21: Mounting Jigs are Bolted to the Base Cans to Hold Base Can Flush with the Pavement and Field Wiring is Routed Through Base Can



Figure 22: Base Cans are then Positioned to Align the Fixtures for Best Visibility by Drivers. Field Wiring is Inserted into the saw Cut and Concrete is Poured



Figure 23: After Concrete is Cured the Mounting Jigs are Removed. The Plywood Covers are Left on Until the Fixture is Installed



Figure 24: Connectors are Spliced into the Field Wiring, and Fixtures Plugged into the Connector and Bolted to the Base Can

Core Drill and Saw Cut Installation



Figure 25: Pre-warning LED Edge Lite Signs are then Mounted in Place.



Figure 26: Pre-warning Signs are Mounted on Both Sides of the Crosswalk



Figure 27: Wiring from the Sign is Routed through the Overhead Archway and Supporting Columns



Figure 28: Wiring is then Routed Down to the Control Enclosure Mounting Location

Core Drill and Saw Cut Installation



Figure 29: Once again, Wiring from the LED Edge Lit Sign is Routed Through the Column and Archway



Figure 30: Wiring from the Second Sign being Routed Down to the Controller Enclosure Location



Figure 31: Controller Enclosure Location Area Cleared and Prepared for Mounting Back Panel



Figure 32: Back Panel Bolted to Wall and Controller Enclosure is then Bolted to the Back Panel

Core Drill and Saw Cut Installation



Figure 33: Field Wiring is then Connected to the Terminal Blocks in the Enclosure and the System Setup for Operation



Figure 34: Controller Shown in NEMA 4 Enclosure



Figure 35: Warning Light System Protecting Pedestrians During the Day



Figure 36: During the Day the Warning Lights are Clearly Visible to Drivers

Core Drill and Saw Cut Installation



Figure 37: Warning Light System Protecting Pedestrians at Night



Figure 38: Warning Lights are Clearly Visible to Drivers at Night