



# WATERPROOFING

## MiraSEAL™ Installation Instructions

### Introduction

Carlisle Coatings & Waterproofing Incorporated (CCW) has prepared this installation guide to assist applicators in the use of MiraSEAL and accessories. While every project is different this is a guide line to use which may not cover every aspect for every project. Before commencing any work, the applicator must become familiar with all product installation procedures and all project conditions.

### System Description

The MiraSEAL is a 100% solids, fluid-applied, single-component, moisture-reacted, elastomeric, coal-tar and solvent free, modified polymer that cures to form a flexible, monolithic, waterproof membrane.

### Advantages

- 100% solid
- Single-component
- Single viscosity that can be used for both horizontal and vertical surfaces
- Seamless
- Easy and quick installation
- Bridges structural or shrinkage cracks

### Accessories

- CCW Reinforcing Fabric
- CCW-201 Sealant
- Sure-Seal® Termination Bar
- CCW MiraSTOP
- EJ-500 Expansion Joint
- CCW MiraDRAIN® Drainage Composite
- CCW MIRADRAIN HC

### Substrate Preparation

New concrete shall be watered-cured, must be level without any voids, honey-combing and protrusions with a light broom finish and in place for 3 days.

Surfaces shall be structurally sound, dry, and free of oil, grease, dirt, laitance, curing or release agents and other contamination that may harmfully affect the adhesion of the membrane.

Grind or fill (as required) surface at cold joints where each pour is at a different plane, to provide a smooth and level surface. Clean metal to expose a bright finish.

Apply CCW-201 Sealant, or MiraSEAL where applicable, at all inside corners to form one inch, 45° angle cants. When MiraSEAL is allowed to cure between coats, solvent-wipe with Weathered Membrane Cleaner required at least 6".

# WATERPROOFING

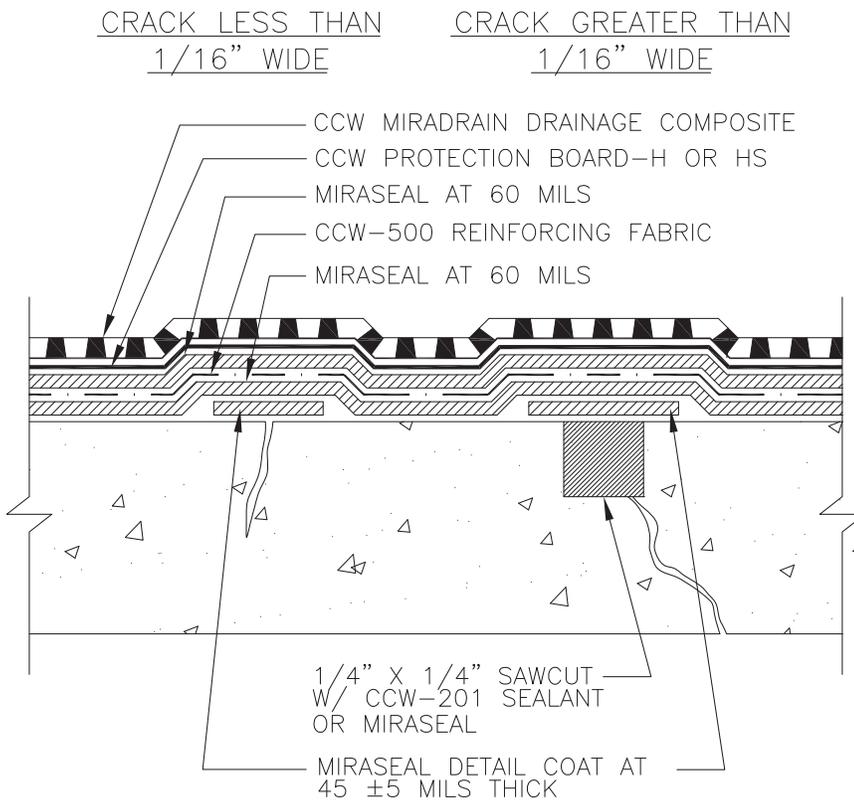
## MiraSEAL Installation Instructions

### Crack Treatment Less Than 1/16"

Clean all cracks. Apply a 4"–6" wide MiraSEAL detail coat over all hairline cracks at 45 mils thick. Film form so as not to be misplaced during subsequent coats. Apply the first layer of MiraSEAL at 60 mils thick using a squeegee or 1/2" nap roller. As soon as the first 60 mil layer is applied install the CCW Reinforcing Fabric while the first layer is still wet. Then apply the second (top) layer of MiraSEAL at 60 mils thick completely covering the CCW Reinforcing Fabric. Allow to cure. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.

### Crack Treatment Greater Than 1/16"

Saw cut all cracks greater than 1/16" to 1/4" wide and 1/4" deep. Clean all cracks. Apply CCW-201 or MiraSEAL into crack and tool flush. Allow to cure over night. Apply a 4"–6" wide MiraSEAL detail coat over all sealed cracks at 45 mils thick. Apply the first layer of MiraSEAL at 60 mils thick using a squeegee or 1/2" nap roller. As soon as the first 60 mil layer is applied install the CCW Reinforcing Fabric while the first layer is still wet. Then apply the second (top) layer of MiraSEAL at 60 mils thick completely covering the CCW Reinforcing Fabric. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.



### NOTES:

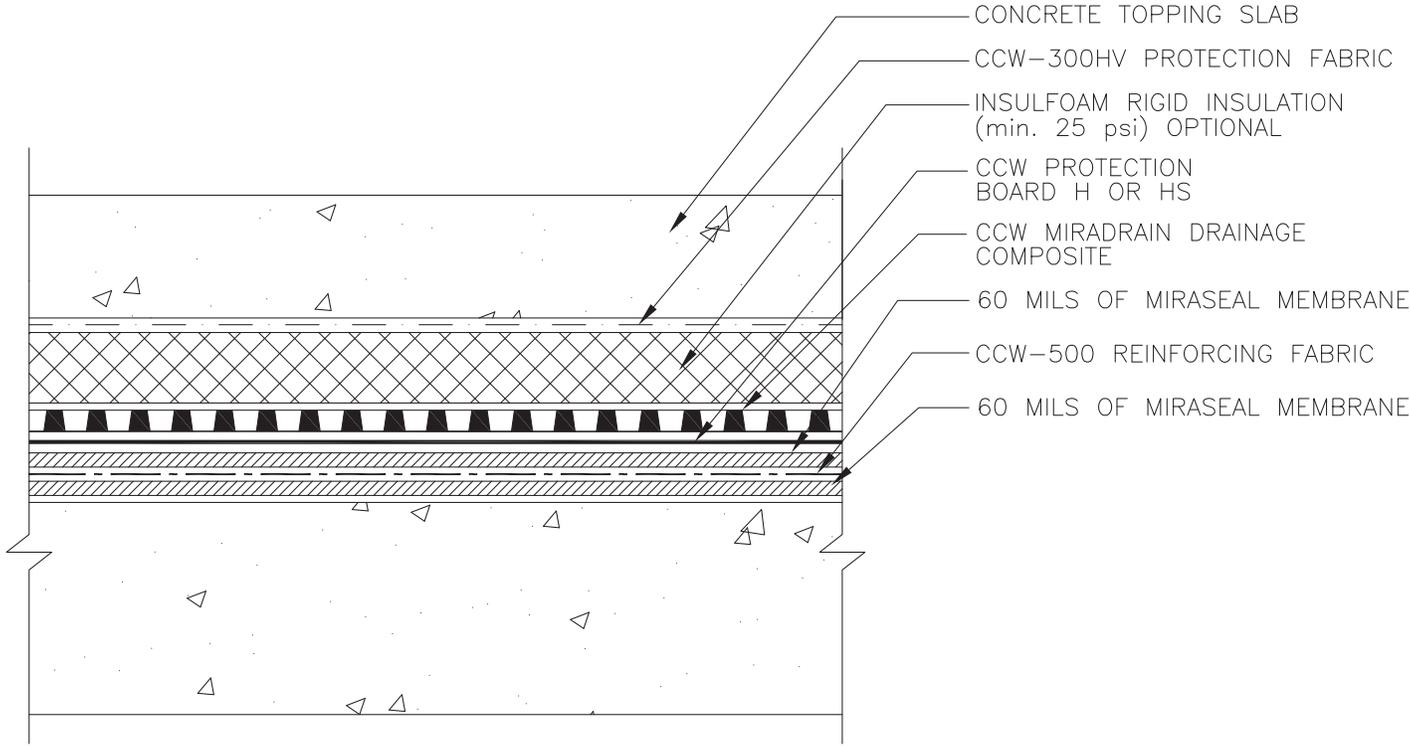
1. SAW CUT CRACKS GREATER THAN 1/16" TO 1/4" WIDE X 1/4" DEEP.
2. APPLY CCW-201 SEALANT AND TOOL FLUSH, ALLOW TO DRY OVERNIGHT.
3. APPLY MIRASEAL DETAIL COAT OVER HAIRLINE CRACKS, COLD JOINTS AND SEALED SAWCUTS A MINIMUM OF 6" WIDE AND 45 MILS THICK AND ALLOW TO CURE.
4. APPLY MIRASEAL MEMBRANE AT 60 MILS THICK.
5. INSTALL CCW-500 REINFORCING FABRIC INTO WET MIRASEAL AND ALLOW TO CURE.
6. APPLY MIRASEAL MEMBRANE AT 60 MILS THICK.
7. CCW PROTECTION BOARD H OR HS.
8. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE

**Horizontal Installation**

Apply the first layer of MiraSEAL at 60 mils thick using a squeegee or 1/2" nap roller. As soon as the first 60 mil layer is applied install the CCW Reinforcing Fabric while the first layer is still wet. Then apply the second (top) layer of MiraSEAL at 60 mils thick completely covering the CCW Reinforcing Fabric. Allow to cure. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.

**Reinforcing Fabric Installation**

Make sure the CCW Reinforcing fabric is installed (embedded) into wet MiraSEAL before it starts to cure. All CCW Reinforcing Fabric laps from row to row and end to end is approximately 1/2". Make sure the CCW Reinforcing Fabric is completely covered with a minimum of 60 mils of MiraSEAL. Allow to cure. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.



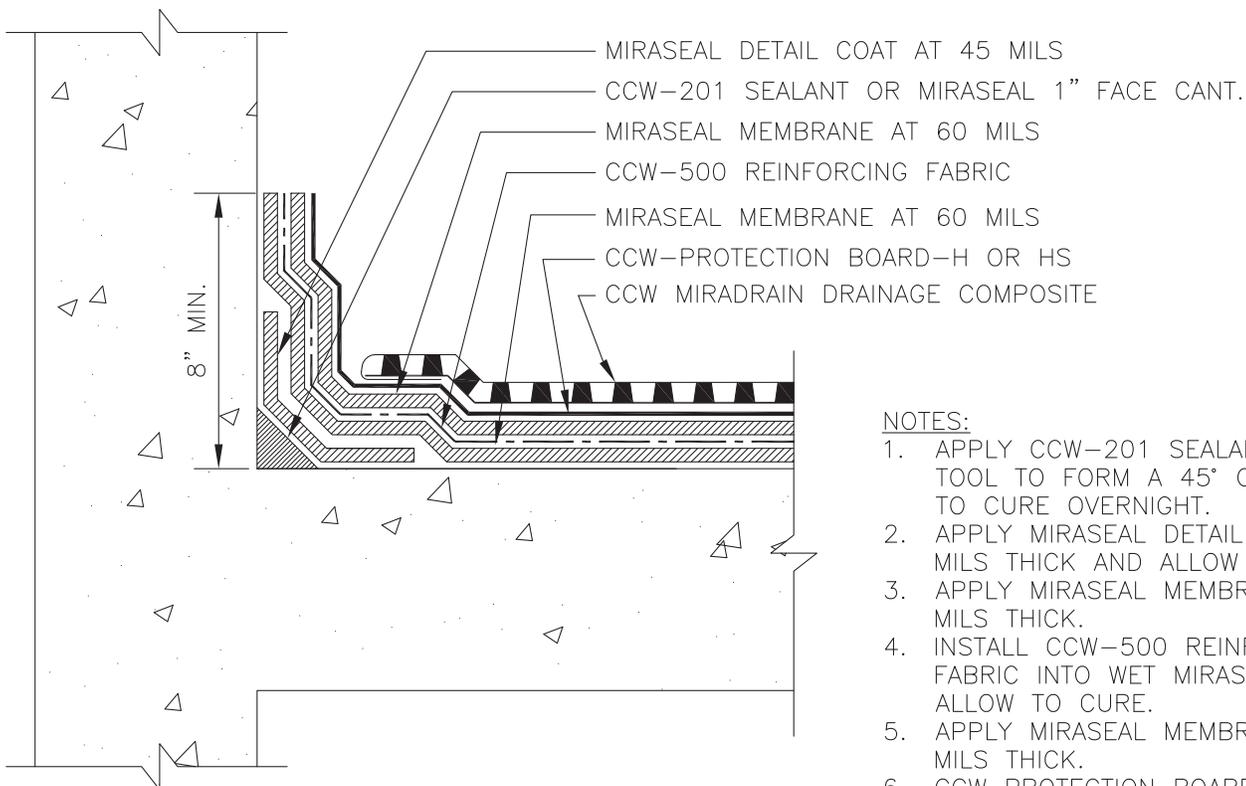
# WATERPROOFING

## MiraSEAL Installation Instructions

### Horizontal - Vertical Transition Installation

Apply CCW-201 Sealant to all inside corners and tool to form a 1 inch face 45° cant. Allow to cure over night. Apply a MiraSEAL detail coat over CCW-201 or MiraSEAL cant at 45 mils thick 4 inches out onto deck and 4 inches up onto wall. Allow to cure. Apply the first layer of MiraSEAL on the deck and 8 inches up onto wall at 60 mils thick. As soon as the first 60 mil layer

is applied install the CCW Reinforcing Fabric while the first layer is still wet. Then apply the second (top) layer of MiraSEAL at 60 mils thick completely covering the CCW Reinforcing Fabric. Allow to cure. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.



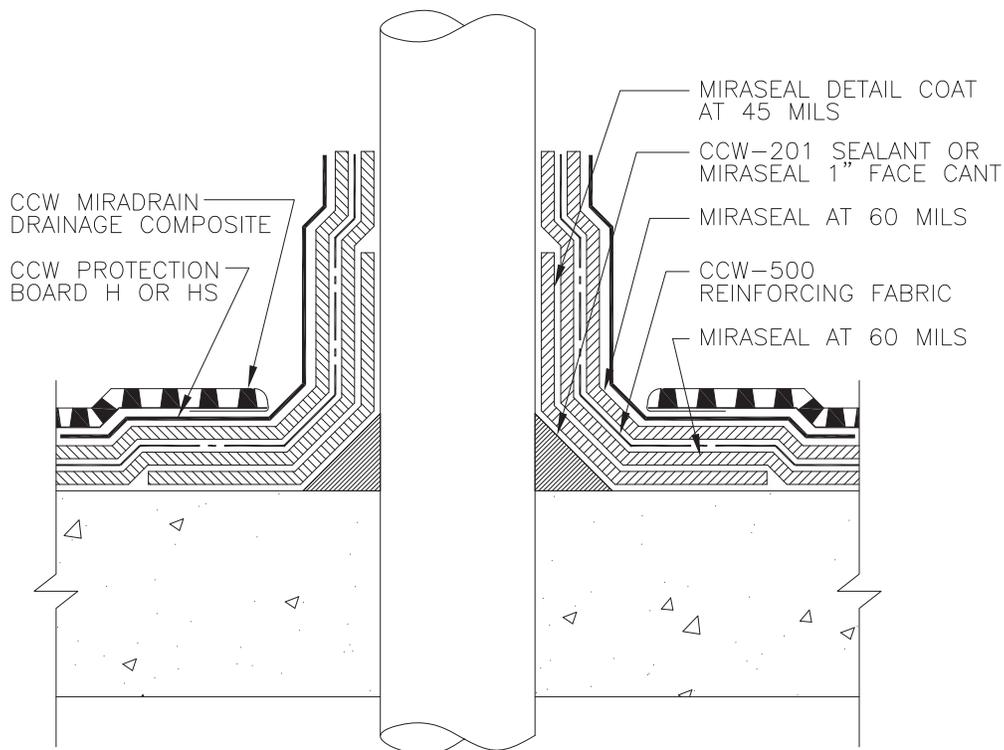
#### NOTES:

1. APPLY CCW-201 SEALANT AND TOOL TO FORM A 45° CANT, ALLOW TO CURE OVERNIGHT.
2. APPLY MIRASEAL DETAIL COAT AT 45 MILS THICK AND ALLOW TO CURE.
3. APPLY MIRASEAL MEMBRANE AT 60 MILS THICK.
4. INSTALL CCW-500 REINFORCING FABRIC INTO WET MIRASEAL AND ALLOW TO CURE.
5. APPLY MIRASEAL MEMBRANE AT 60 MILS THICK.
6. CCW PROTECTION BOARD H OR HS.
7. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

## Slab Penetrations

All penetrations must be secured to prevent any movement. Penetrations must be clean, dry and free from rust. Clean all metal to a bright finish. Apply CCW-201 completely around penetration and tool to form a 1 inch face 45° cant. Allow to cure over night. Apply a MiraSEAL detail coat over CCW-201 Sealant cant at 45 mils thick 4 inches out onto deck and 4 inches up onto penetration. Apply the first layer of MiraSEAL on the deck and 8 inches up onto penetration at 60 mils thick. As soon as the first

60 mil layer is applied install the CCW Reinforcing Fabric while the first layer is still wet. Note that the CCW Reinforcing Fabric has to be slit so it will make a radius around the penetration. Allow to cure. Then apply the second (top) layer of MiraSEAL at 60 mils thick completely covering the CCW Reinforcing Fabric. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.



### NOTES:

1. CLEAN METAL TO A BRIGHT FINISH.
2. APPLY CCW-201 SEALANT OR MIRASEAL AND TOOL TO FORM A 1" FACE, 45° CANT, ALLOW TO CURE OVERNIGHT.
3. APPLY MIRASEAL DETAIL COAT AT 45 MILS THICK AND ALLOW TO CURE.
4. APPLY MIRASEAL MEMBRANE AT 60 MILS THICK.
5. INSTALL CCW-500 REINFORCING FABRIC INTO WET MIRASEAL AND ALLOW TO CURE.
6. APPLY MIRASEAL MEMBRANE AT 60 MILS THICK.
7. CCW PROTECTION BOARD H OR HS.
8. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

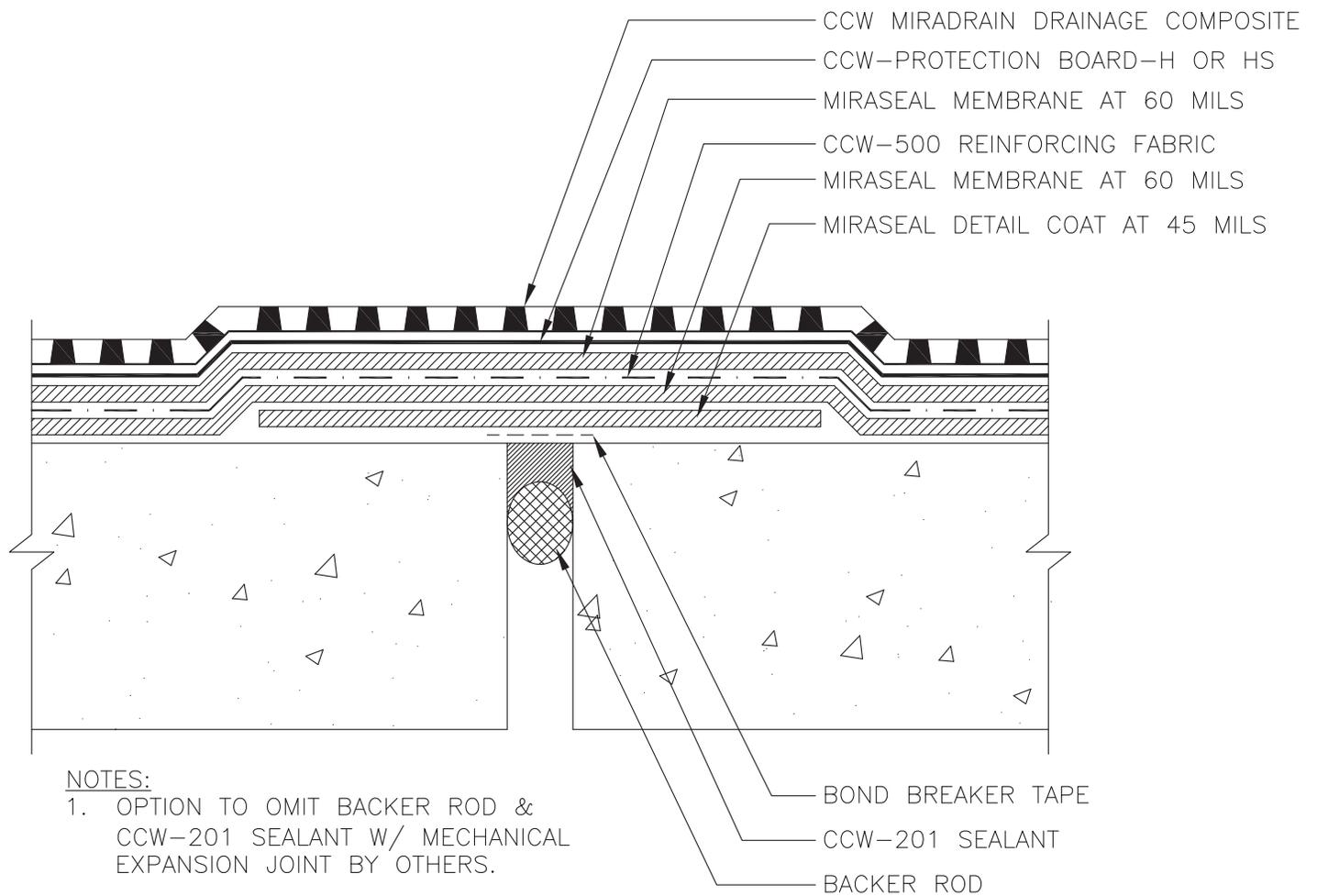
# WATERPROOFING

## MiraSEAL Installation Instructions

### Expansion Joints

Install backer rod into joint and apply CCW-201 tool flush. Note that sealant depth should be equal to  $\frac{1}{2}$  of the width of the joint. Allow to cure over night. Install a bond breaker tape over the CCW-201 sealant equal to three times the width of the joint. Apply a MiraSEAL detail coat over all sealed cracks at 45 mils thick extend 6" past the joint at either side. Allow to cure. Apply the first layer of MiraSEAL at 60 mils thick using a squeegee

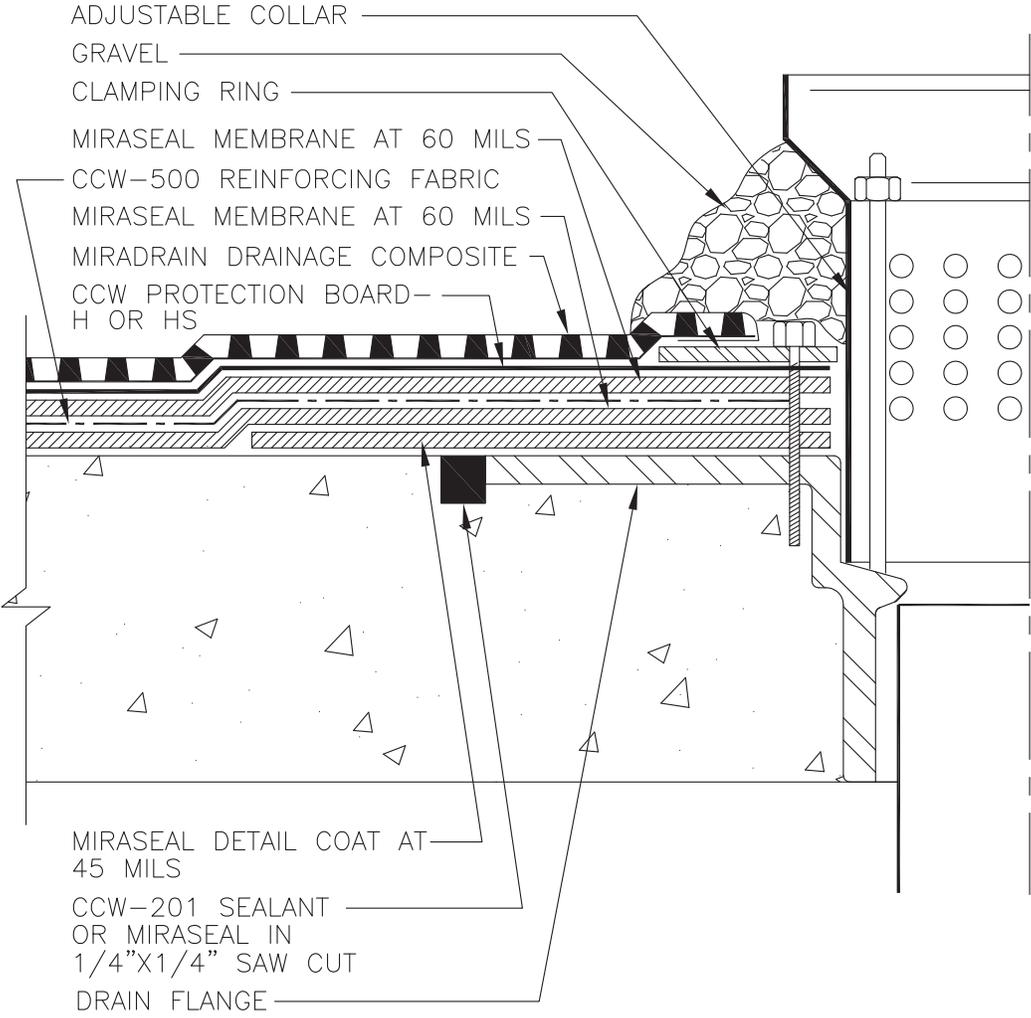
or  $\frac{1}{2}$ " nap roller. As soon as the first 60 mil layer is applied install the CCW Reinforcing Fabric while the first layer is still wet. Then apply the second (top) layer of MiraSEAL at 60 mils thick completely covering the CCW Reinforcing Fabric. Allow to cure. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.



**Drain Installation**

Drains must be clean, dry and free from rust. Clean metal flange to a bright finish. Saw cut around perimeter of drain flange to 1/4" wide and 1/4" deep. Clean out saw cut. Apply CCW-201 into crack and tool flush. Allow to cure over night. Apply a MiraSEAL detail coat over drain flange, CCW-201 Sealant and 6" out on to deck. Apply the first layer of MiraSEAL on the deck around drain 4 feet by 4 feet at 60 mils thick. As

soon as the first 60 mil layer is applied install a 40" x 40" piece of CCW Reinforcing Fabric while the first layer is still wet. Allow to cure. Note that the CCW Reinforcing Fabric has to be cut out in the center to expose the drain. Then apply the second (top) layer of MiraSEAL at 60 mils thick completely covering the CCW Reinforcing Fabric. Allow to cure. Install CCW MiraDRAIN Drainage Composite or CCW-Protection Board-H or HS.



SCIENCE. SERVICE. SOLUTIONS.



# WATERPROOFING

## MiraSEAL Installation Instructions