# Companion Guide for Voluntary Training
# **Countertops**

## Standard References

- ANSI/KCMA A161.1 - Performance & Construction Standard for Kitchen and Vanity Cabinets.
- ASTM C97/C97M - Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone.
- ASTM C503/C503M - Standard Specification for Marble Dimension Stone.
- ASTM C1028 - Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method.
- ANSI/NSC 373 - Sustainable Production of Natural Dimension Stone.
- The Marble Institute of America (MIA) Dimension Stone Design Manual - Provides detailed guidance on the selection, design, installation, and maintenance of stone countertops.
- The National Kitchen & Bath Association (NKBA) Kitchen Planning Guidelines - Offers comprehensive guidelines on kitchen layout and design, including countertops.
- The Tile Council of North America (TCNA) Handbook for Ceramic, Glass, and Stone Tile Installation - Contains detailed information on the installation of tile and stone countertops.
- Marble Institute of America (MIA) / Natural Stone Institute (NSI) Standards
- Dimension Stone Design Manual
- MIA Accreditation Program Standards
- Building Stone Institute (BSI) Publications
- Building Stone Magazine and Technical Bulletins

# Suggested, Generally Accepted Installation Best Practices for Installing **Countertops**

## 1. Pre-Installation Preparation:

### 1.1 Site Inspection and Measurement:
- Conduct a thorough site inspection to ensure the workspace is clean and free of obstructions.
- Measure the area where the countertop will be installed to confirm dimensions against the template and design specifications.
- Check that the base cabinets are level and securely fastened.

### 1.2 Material Inspection:
- Inspect the countertop material for any defects such as cracks, chips, or discoloration.
- Ensure all cutouts for sinks, cooktops, and other fixtures are correctly placed and sized.

## 2. Installation Process:

### 2.1 Surface Preparation:
- Clean the surface of the base cabinets to remove any dust and debris.
- Apply adhesive to the top edges of the base cabinets, following the manufacturer's recommendations.

### 2.2 Placing the Countertop:
- Carefully place the countertop onto the base cabinets.
- Adjust the position to ensure it is level and properly aligned.

### 2.3 Seaming and Joining:
- If the countertop consists of multiple pieces, ensure the seams are tight, level, and properly aligned.
- Apply the recommended adhesive or sealant to the seams and use clamps to hold the pieces together until the adhesive sets.

### 2.4 Edge Treatment:
- Inspect the edges for smoothness and consistency.
- Ensure the edge profiles (beveled, bullnose, etc.) match the design specifications.

### 2.5 Backsplash:
- Align and attach the backsplash to the wall using the recommended adhesive.
- Seal the joint between the countertop and backsplash with silicone caulk.

# Suggested, Generally Accepted Installation Best Practices for Installing **Countertops** (cont.)

Below is the checklist corresponding to the Critical to Quality **(CTQ)** items:

### 2.6 Sink and Fixture:
- Position and secure the sinks and other fixtures according to the design specifications.
- Ensure all fixtures are properly sealed to prevent leaks.

## 3. Post-Installation:

### 3.1 Finishing:
- **CTQ:** Inspect the surface finish for uniformity and smoothness.
- Polish the countertop, as required, to achieve the desired finish.

### 3.2 Sealant Application:
- Apply sealant to the countertop surface if applicable, following the manufacturer's instructions.
- Ensure even application and allow sufficient curing time.

### 3.3 Cleanliness:
- **CTQ:** Clean the countertop and surrounding area to remove any installation residue, dust, or debris.

## 4. Quality Inspection and Documentation:

### 4.1 Final Inspection:
- **CTQ:** Conduct a thorough inspection to ensure all aspects of the installation meet quality standards.
- **CTQ:** Verify that the countertop is level, seams are properly joined, and the sink(s) is (are) securely installed.