**NTCA Regional Training Program**

**Introduction to Industry Standards**

**and**

**Substrate Preparation for Large Format Tile**

This is a full day training program open to NTCA Members and tile industry professionals. It is presented in numerous cities across the United States. The program is led by a highly qualified and experienced National Tile Contractors Association trainer supported by a team of NTCA trainers and other tile industry experts. Attendees will learn how to use ANSI A108 installation standards, TCNA Handbook methods and manufacturer instructions in both a classroom and hands-on environment to address real world tile system installation challenges. The focus of this course will be substrate preparation for, and setting of large format tile.

Areas to be covered:

* ANSI standards and how to apply them
* How to use the TCNA Handbook
* Different substrates and standards that apply to them
* Substrate preparation for floors and walls
* Installation of cementitious backer board for walls
* Analysis and correction of cementitious backerboard installed by others
* Setting material selection, mixing, and usage
* Analysis of walls and floors for flatness
* Determination of best methods and materials to correct floors and walls that do not meet standard tolerance for flatness.
* Selection and proper application of primers and liquid membranes
* Installation of movement joints and dams for flowable / self-leveling underlayment
* Trowel and tool selection and proper techniques for using them
* Setting large format tile to achieve 80% and 95% bond coat coverage
* Bond coat coverage thickness
* Saturated Surface Dry

This program will stress:

* Industry standards and methods
* Use of manufacturer instructions
* Substrate installation, analysis and preparation
* Selection and installation materials such as mortars, membranes, grouts, sealants, drains and related setting materials
* Selection and use of tools including specialty tools
* Efficient work flow and teamwork
* Job site safety and health practices

**NTCA Regional Training Program**

**Agenda**

**Tile Industry Standards based**

**Substrate Preparation for Large Format Tile**

**7:30 - 8:00** **Arrive at training location**

* Sign in

**8:00** **Welcome and introductions**

* + - Overview of seminar and agenda

**8:10** **Classroom: Tile Industry Methods and Standards and References (NTCA)**

* Introduction to the major tile industry standards
	+ - * ANSI A108 / A118 / ANSI A136.1
			* ANSI A137.1 / A137.2 / A137.3

**9:00** **Classroom: How to Navigate and Use the TCNA Handbook (NTCA)**

**9:45** **Break**

**10:00** **Safety Briefing**

**10:15** **Hands on: Substrate Prep for Floors and Walls (NTCA / Manufacturer)**

* Inspect horizontal and vertical substrates for flatness
* Proper substrate preparation, materials and techniques
* Proper installation of backerboard for walls

**10:30** **Break into teams**

**10:35** **Hands on: Substrate Prep for Floors (NTCA / Manufacturer)**

* Inspect horizontal substrates for flatness
* Discuss expansion joints, control joints, perimeter joints
* Discuss proper materials, tools, techniques for SLU
* Install perimeter joints and primer

**11:15** **Hands on: Substrate Prep for Walls (NTCA / Manufacturer)**

* Inspect, install, correct horizontal substrates for flatness
* Proper materials, tools, techniques for rapid setting patch
* Install rapid setting patch material to obtain required flatness

**12:00** **Lunch**

**12:30** **Review / Q&A**

**12:45** **Hands On: Install Self-Leveling Underlayment**

* Use a variety of techniques to mix and pour SLU
* Groups will compare notes about mixing / pouring techniques

**2:45 Break**

**3:00** **Hands on: Mortar Selection, Mixing and Bond Coat Coverage for Large Format Tile**

* Mix mortar per manufacturer instructions
* Trowel selection and proper application of mortar to ensure proper bond coat thickness and coverage for large format tile in dry and wet areas on walls and floors

**4:00** **Hands on: Movement Joints and Sealant Installation**

**4:30** **Review and Q&A**

**Instructor led instruction will cover these main points:**

* Understanding and use of industry accepted standards, methods, best practices, manufacturer instructions and why using them matters
* Substrate installation to meet standards for Large Format Tile
* Trowel selection and troweling techniques
* Bond coat thickness / Coverage
* Control / Expansion / Perimeter joints