



G3 Concrete Polishing System by Wagman Metal Products:

The following guide spec has been made available by Wagman Metal Products to assist construction professionals in creating a polished concrete specification. Contact us for further assistance if needed at: (717) 854-2120, or by email email@wagmanmetal.com. For product orders call (800) 233-9461.

PART 1 GENERAL

1.1 SUMMARY

- A. This section includes the following.
 - 1. Wet processing and refinement of Nano-infused Cement (NIC) polished concrete.
- B. Related Sections:
 - 1. Section 03300 Cast-In-Place Concrete

1.2 REFERENCES

- A. American Society for Testing and Materials:
 - 1. ASTM D5767-18 Standard Test Method for Instrumental Measurement of Distinctness-of-Image (DOI) Gloss
 - 3. ASTM C1895-20 Standard Test Method for Determination of Mohs Scratch Hardness.
- B. National Floor Safety Institute (NFSI)
 - 1. ANSI B101.3
- C. Surface Micro Texture:
 - 1. ASME B46.1-2009 (R2002), Surface Texture

1.3 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. Use an installer and skilled crew with appropriate experience in applying NIC technologies.
 - 1. Use and installer and crew with appropriate experience in wet processing concrete, slurry mitigation, and micro surface texture measurement.
 - 1. Use and installer and crew with appropriate experience in achieving high-traction coefficient of friction as defined by ANSI B101.3.
- B. Manufacturer's Certification:

SECTION 03 34 15 - Polished Concrete for New and Existing Slabs

1. A letter of certification from polished concrete system manufacturer is required. The installer must be a certified applicator of NIC technologies, and understand the requirements and best practices as set forth by the manufacturer.

PART 2 – PRODUCTS

2.1 MATERIALS AND MANUFACTURERS

A. POLISHED CONCRETE SYSTEM

1. G3 Polishing System, by Wagman Metal Products, Inc., 400 South Albemarle Street, York, PA 17403 - email@wagmanmetal.com, Fax: (717) 854-4540, Phone: (800) 233-9461

2.2 RELATED MATERIALS

A. Cutting Compound, Densifiers, and Diamond Tooling:

1. Nano-infused Cement Chemistry Products
2. Average roughness (Ra) Diamond Tooling
3. Slurry Mitigation Agents
4. Joint Clean and Fill Products
5. Special colorants (*when applicable*)

B. Water:

1. Potable

PART 3- EXECUTION

3.1 SURFACE CONDITIONS:

- A. Review condition of concrete slab to ensure factors that may negatively affect installation or final floor can be corrected prior to starting installation. Do not begin execution of floor system until any and all negative aspects have been mitigated.
- B. Ensure that base slab meet finish and surface micro texture profile requirements. Take initial Ra readings to determine mechanical starting point of refining concrete slab.

3.2 APPLICATION

SECTION 03 34 15 - Polished Concrete for New and Existing Slabs

- A. Begin polished concrete operations with manufacturer's technical representative on site to answer questions and troubleshoot.
 - B. Processing and Polishing the Concrete Surface
 1. Measure and record initial Mohs, Ra, and Image Clarity Readings to quantify the starting point of the installation process.
 2. Ensure all relevant safety protocols are being followed.
 3. Follow manufacturer recommended installation procedures.
 4. Refine and process floor to required Ra, Image Clarity, and COF polishing benchmarks.
 5. Record benchmarks and compare with architect approved mockup.
- 3.4 PROTECTION OF FLOORS:
- A. Protect finished work until fully cured in accordance with manufacturer's recommendations. Cardboard, roll-out coverings not acceptable as they are too fragile to protect finished floor. Review maintenance procedures for Ra, Image Clarity, and COF with owner's maintenance representative.

END OF POLISHED CONCRETE SPECIFICATION SECTION 03 34 15