PROFILE DIAMOND GRINDING CONCRETE PAVEMENT  
Effective: March 23, 2022

Description. This work shall consist of diamond grinding concrete pavement.

Equipment. Equipment shall be according to the following.

1. Diamond Grinder. The diamond grinder shall be a self-propelled planing machine specifically designed for diamond saw grinding. It shall be capable of accurately establishing the profile grade and controlling the grinding cross slope. It shall also have an effective means for removing excess material and slurry from the surface and for preventing dust from escaping into the air. The removal of slurry shall be continuous throughout the grinding operation. The slurry shall be disposed of according to Article 202.03.

The grinding head shall be a minimum of 4 ft. (1.2 m) wide, and the diamond saw blades shall be gang mounted on the grinding head at a rate of 50 to 60 blades/ft. (164 to 197 blades/m).

**CONSTRUCTION REQUIREMENTS**

General. After all components have been properly cured, the concrete pavement shall be ground over its entire length and over a width that extends to within 2 ft. (600 mm) of the curbs. Whenever possible, each subsequent longitudinal grinding pass shall progress down the cross slope from high to low. The maximum thickness removed shall be 1/4 inch (6 mm); however, additional removal thickness may be permitted.

The grinding process shall produce a pavement surface that is true in grade and uniform in appearance with longitudinal line-type texture. The line-type texture shall contain corrugations parallel to the outside pavement edge and present a narrow ridge corduroy type appearance. The peaks of the ridges shall be 1/8-inch +/- 1/16-inch (3 mm +/- 1.5 mm) higher than the bottom of the grinding with evenly spaced ridges. It shall be the Contractor’s responsibility to select the actual number of blades per foot (meter) to be used to provide the proper surface finish for the aggregate type and concrete present on the project within the limits specified above.

The vertical difference between longitudinal passes shall be 1/8-inch (3 mm) maximum.

Method of Measurement. This work will be measured for payment in place and the area computed in square yards (square meters) of diamond grinding performed.

Basis of Payment. This work will be paid for at the contract unit price per square yard (square meter) for PROFILE DIAMOND GRINDING CONCRETE PAVEMENT.