# **SECTION 105 CONTROL OF WORK**

* 1. **Conformity to the Contract.**

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Price reduction for those elements which are not included in the Table of Price Reduction Factors will be determined by the Engineer.

The Contractor will not have the option of accepting a price reduction in lieu of producing specification material. Continued production of non-specification material will not be permitted. Material which is obviously defective may be isolated and rejected without regard to sampling sequence or location within a lot.

* 1. *Retroreflectivity of High Build Acrylic Waterborne Paint and Modified Epoxy Pavement Marking*. Retroreflectivity of High Build Acrylic Waterborne Paint and Modified Epoxy Pavement Marking shall be tested as follows:
     1. The Contractor shall take retroreflectivity readings on all high build acrylic waterborne paint and modified epoxy pavement marking lines for each day of roadway striping work completed on the project. A test section is defined as each continuous line type (lane lines, centerlines, edge lines, channelizing lines, and others) 500 feet in length at a location that is selected by the Contractor to be approved by the Engineer, which will be the representation of the work that has been completed in a single day. The Contractor shall use a Contractor-furnished retroreflectometer conforming to ASTM E1710 or AASHTO TP111. The retroreflector meter shall be calibrated, tested and operated in accordance with manufacturer recommendations. The Contractor shall take 10 retroreflectivity readings within the test section for each stripe. These 10 readings shall be taken approximately 40 feet apart, and shall be averaged to determine the retroreflectivity of that test section of striping. In cases where striping is less than 500 feet long, 10 readings shall be taken in 10 equal intervals.
     2. The calibration for the retroreflector meter shall be witnesses and verified by the Engineer every day, prior to the readings being taken. The retroreflectivity readings shall be taken in the presence of the Engineer no sooner than 3 days and no later than 21 days after the marking is tack free. All scheduled readings within this timeline or beyond resulting in a reduced reading and/or failure will be at the risk of the Contractor. Initial minimum retroreflectivity reading (mcd/m2/lux) in the representative test section of pavement marking paint shall be according to the following table. The pay factor for High Build Acrylic Waterborne Paint and Modified Epoxy Pavement Marking which is allowed to remain in place at a reduced price, shall be according to the following table and shall be applied to the unit bid price for Item 627, High Build Acrylic Waterborne Paint and Modified Epoxy Pavement Marking, and applied to the work completed in the respective day.

|  |  |  |  |
| --- | --- | --- | --- |
| **Color** | **Retroreflectivity Reading (R) in the representative test section (**mcd/m2/lux**)** | | **Pay Factor (%)** |
| **Modified Epoxy** | **High Build Acrylic Waterborne Paint** |
| White | R > 350 | R ≥ 300 | 100 |
|  |  |  |
| 300 ≤ R < 350 | 250 ≤ R < 300 | 75 |
|  |  |  |
|  |  |  |
| R < 300 | R < 250 | Remove and replace |
| Yellow | R > 200 | R ≥ 150 | 100 |
|  |  |  |
| 150 ≤ R < 200 | 100 ≤ R < 150 | 75 |
|  |  |  |
|  |  |  |
| R < 150 | R < 100 | Remove and replace |

* + 1. Prior to taking retroreflectivity readings, the Contractor shall remove at the retroreflectivity reading locations any excess beads placed during marking application.
    2. Retroreflectivity readings may be altered by chip seals, rumble strips, wet surfaces, ice treatment, snow conditions, or abnormal pavement conditions. If the Engineer determines that accurate reading cannot be taken within the specified timeline in accordance with the manufacturer’s recommendations, through no fault of the Contractor, the Engineer may waive the requirements for testing and pay reduction.
    3. Any and all work, including traffic control required for retroreflectivity readings, shall be included in the cost of the unit bid price for Item 627.