



Certification of Patented or Proprietary Product

By signature of this document, the State official is certifying that in accordance with the requirements of 23 CFR 635.411 (a) (2), this patented or proprietary item is:

- Essential for synchronization
 No equally suitable alternative exists

Duration	Statewide Application of 3M Wet Reflective Tape
<input type="checkbox"/> Project Specific Certification <input checked="" type="checkbox"/> Statewide Blanket Certification (5 yrs maximum for blanket) Specify dates of term: From: January 1, 2014 To: December 31, 2018	This certification covers the use of 3M A380AW and A380AW-5 Wet Reflective Tape on multi lane divided highways. FA Project #: Stewardship: <input type="checkbox"/> Full Oversight <input type="checkbox"/> State Administered Manufacturer Name and address: 3M St. Paul Minnesota

Description of Item(s)/Work:
 Wet Reflective Tape- Products covered under this certification will be used on let contracts for placement for 4" wide lane lines, lane line extensions and 2' long lane line supplement; and 8" wide channelizing lines and extensions; 8" wide drop, exit lane and 2' long dotted supplement and 8" wide ramp gore markings. The tape will be placed into a 120 mils deep grooved slot to ensure longevity of the marking from snow plow activity. A380AW Tape is placed in asphalt. Contrast A380AW-5 Tape is placed in concrete.

Justification:
 4" wide wet reflective tape as shown below costs up to 12 times, 8" wide wet reflective tape up to 11 times, more than standard, non contrast, surface placed epoxy for the same width but offers superior wet night visibility needed for motorist guidance on multilane state highways. This cost includes grooving a slot to ensure longevity. Research conducted since 2009 has not found products capable of meeting the minimum WisDOT requirements of 250 mcd(initial) and 80 mcd (after 1 year) based on the ASTM E 2177 test. In 2011, more than 10% of all fatalities and almost 15% of all injuries occurred under wet roadway conditions. Statistics in Wisconsin for 2011 have shown that more than 12% of all crashes occurred under wet roadway conditions and almost 40% of these crashes occurred in dark, dawn, or dusk lighting conditions. Improved wet reflective marking may help to reduce the crashes listed above. The TTI Paper 09-0488, entitled "The Benefits of Pavement Markings: A Renewed Perspective Based on Recent and Ongoing Research" furthers the claim that no studies have evaluated the quantitative safety benefits of wet-reflective markings but a few studies have evaluated wider edge and center line markings.

Average of Surface FY 2013 Let Bid Cost in dollars by width and linear feet:

4" Epoxy	8" Epoxy	4" A380AW	8" A380AW	4" A380AW-5	8" A380AW-5
0.25	0.55	3.06	5.77	5.09	7.44

Supporting/Reference Documentation :
 Attached document: 2013Certification2.docx

CTRE Final Report November 2011 entitled "Wet Reflective Pavement Marking Demonstration Project", 3M 380AW Tape (#11), Table 12.
http://www.intrans.iastate.edu/reports/tr-597_wet_reflective_w_cvr.pdf

State DOT Official (signature): <i>William R. McNary</i>	Name and Title: William R. McNary State Traffic Engineer	Date: 12/18/2013
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Note: A copy of the signed Certification must be sent to the FHWA Division Office for their records.