

# Maintenance Advisory

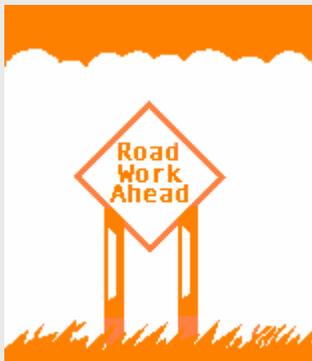
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From Jon Reincke, Engineer of Maintenance

MDOT  
Maintenance Support Area  
6333 Old Lansing Road  
Lansing, MI 48917-8504  
Phone / 517-322-3300  
Fax / 517-322-3385  
[www.michigan.gov/mdot/](http://www.michigan.gov/mdot/)

For questions regarding this advisory, contact:

Larry White  
Region Support Engineer  
[whitelk@michigan.gov](mailto:whitelk@michigan.gov)  
517-322-3310



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## Plastic Sign Substrates

During the past year, the Southwest Region piloted new signs made with a plastic substrate. The objective of the pilot study involved finding sign material that maintenance operators could use for night-work. Roll-up signs are not approved for night-work lane closures. The plastic substrate is a 13mm thick polypropylene/polyethylene material that meets Test Level III crash-worthiness guidelines as set forth by NCHRP 350, when used with the proper X-footprint sign base. Please note that bases used with plastic signs are not interchangeable with bases used for roll-up signs, nor should roll-up sign bases be modified from the current configuration to fit plastic sign bases.

The Traffic Recommendations Committee (TRC) approved the use of information in this advisory for maintenance purposes only. Construction activities are not covered by this advisory. Plastic substrate signs can be used for both day and night maintenance work and shall follow all standards governing the minimum bottom height (MBH). Guidelines governing MBH are in the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, Sections 812; also consult the Michigan Manual of Uniform Traffic Control Devices, Part VI, for additional information on MBH.

Plastic substrate is an acceptable replacement material for plywood. It exhibits many of the same physical properties as plywood but at a lower cost and weight. The most notable benefit is that plastic signs weigh less than wood, making it easier for maintenance operators to carry. The table below compares plastic and plywood substrates.

	Corrugated Plastic	Plywood
Thickness	13mm (1/2")	5/8"
Approximate cost per sq. ft.	\$0.65	\$1.78
Approximate cost per 4' x 8' sheet	\$21.00	\$57.00
Wt. per 4' x 4' sign	9.0 lbs	33.0 lbs
Sheeting bond	Same	Same
Durability	Same	Same
FHWA approved	Yes	Yes

Plastic substrate is available under one or more of the following brand names: IntelPlast, InteCell, CoroPlast and SafetyCor. All brands are considered interchangeable. Plastic substrate can be purchased directly from Intelplast Group LTD. at 800-452-2117 extension 8210. The minimum order for 4' X8' sheets is one pallet of 85. The minimum order for other sizes is three pallets of 85 sheets each.

Please share this information with others in your area that are involved with maintenance of activities within the MDOT right-of-way. For specific questions regarding traffic control plans and requirements, please contact the local Transportation Service Center (TSC) or Region Traffic and Safety (T&S) Engineer or T&S Technician for further guidance.