

**Date: February 24, 2005**

**TO:** All HQ Directors: Operations, Planning & Major Projects  
All Regional Directors  
All District Managers, Transportation  
Manager, Provincial Sign Program

**Subject: SPECIFICATIONS FOR WORK ZONE SIGN SUBSTRATE MATERIAL –  
MINISTRY OF TRANSPORTATION (MoT) PROJECTS**

**Background:**

Work zone signs (“C” series or “TW” series) are used to provide directional information and warn motorists of hazards in work zones where maintenance and construction activities are occurring on or near the highway.

The Ministry’s *“Sign Pattern Manual”* specifies the type of substrate (“backing”) required for standard traffic signs. Historically, only sheet aluminum or 8 mm MD plywood substrate have been specified for use on MoT standard signs. However, “C” Series and “TW” work zone series signs purchased and used by contractors for work zones are not considered to be Ministry assets and as such the substrate type need not be constrained by the specifications in the *Sign Pattern Manual*.

**Policy**

“C” and “TW” work zone series signs do not have to comply with the substrate specification as listed in the ***“Sign Pattern Manual.”*** This will allow sign fabricators to utilize alternative substrate materials in addition to the aluminum and plywood already in use. Most of the alternative substrates are less expensive than aluminum and plywood.

“C” or “TW” work zone series signs may “now” also be fabricated using alternative substrate material or other grades of plywood providing the sign is adequately mounted and the substrate sufficiently rigid to display the sign to road users under all road and climatic conditions for the duration of the work zone activity.<sup>1</sup>

The substrate material shall be compatible with the sign sheeting material and not result in premature sheeting failure. The sheeting material shall perform to the manufacturer’s specifications for at least the duration of the project.

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<sup>1</sup> This circular does not affect the policy which permits the use of “roll-up” or flexible sign sheeting material per T-Circular T-13/00. Note that “roll-up” signs use only ASTM Level IV sheeting therefore when numerous Roll-up signs are used in a work zone, consistent use of sign sheeting levels on all signs should be ensured.

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Alternate sign substrate materials include, but are not limited to; fiberglass, various forms of plastic or plastics composites or any other material provided the size, shape and colour of the signs comply with the "**Traffic Control Manual for Work on Roadways**" or subsequent technical bulletins or circulars updating this document.

"C" or "TW" work zone signs made with aluminum or 8 mm MD plywood substrate will continue to be acceptable work zone signs.

Traffic control paddles utilized by traffic control persons are also subject to this policy and therefore can use alternate substrates.

The sheeting specification for "C" and "TW" work zone series signs must comply with the specification listed in the "**Sign Pattern Manual**" or as otherwise specified in technical bulletins or circulars or in the contract special provisions.

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