

# TIRE INFORMATION SERVICE BULLETIN

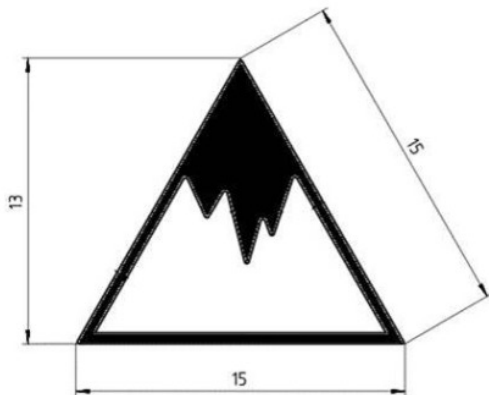
## PASSENGER TIRES FOR USE IN ICE CONDITIONS

Passenger tires designed for use in ice conditions give superior performance on ice in addition to meeting the USTMA Severe Snow Use Tire Definition.<sup>1</sup>

Passenger tires designed for use in ice conditions are recognized by manufacturers to attain an Ice Grip Index equal or greater than 1.18 as compared to the 16" Standard Reference Test Tire per ASTM F2493, when using ISO 19447:2021, "Passenger Car Tyres - Method for measuring ice grip performance - Loaded new tyres."

Passenger tires designed for use in ice conditions that meet the performance criteria above, qualify for marking on at least one sidewall with the letters "M" and "S" (e.g., MS, M/S, M&S, M+S, etc.) plus a pictograph of a mountain with a snowflake<sup>1</sup> and a pictograph of a mountain with ice. The mountain profile shall have a minimum base of 15 mm and a minimum height of 13 mm and shall contain three icicles with the middle icicle being the longest. An "Ice Grip Symbol" pictograph identifies an ice tire.<sup>2</sup>

An example of the Ice Grip Symbol is shown below in Figure 1.



**FIGURE 1:**  
Minimum 15 mm base and 13 mm height.  
Drawing not to scale.

Source: UN Regulation No. 117 (ECE/TRANS/WP.29/2022/8)



**FIGURE 2:**  
Tire sidewall with ice tire, three peak mountain snowflake  
and M + S symbols.

<sup>1</sup> For the USTMA Severe Snow Use Tire Definition and the three peak mountain snowflake (3PMS) pictograph, refer to TISB Vol. 37, "USTMA Definition for Passenger and Light Truck Tires for Use in Severe Snow Conditions."

<sup>2</sup> The Ice Grip Symbol pictograph and dimensional requirements are established in UN ECE Regulation No. 117.