



CERTIFICATE

This is to certify, that flexibility of ice hockey dasher board type "RAITA HORNIUM" manufactured by Raita Sport Oy has been tested by the University of Jyväskylä.

The dasher board was measured at "Synergia Areena" in Jyväskylä on May 28, 2014.

Technical construction of the tested dasher board:

The height of dasher board was 110 cm from the floor to the top sill. The board was equipped with public protection shielding made of 15 mm thick acrylic panes. 13 cm of the lower end of the acrylic panes were installed inside the dasher board elements holding them in upright position. 4 mm thick and 10 cm wide polycarbonate covering lists were used between the acrylic panes. The dasher boards system was in place as a complete installation.

Test procedure:

Test was made using 60 kg pendulum in vertical position. Impact speed $3.37 \pm 0,26$ m/s. Impact point at the public shielding of straight part of dasher board, height of 155 cm from the floor. Displacement was registered using (*Fastec Inline, Fastec Imaging Corporation, San Diego, CA, USA*) high speed video camera system and (*Vicon Motus version 8.5, Vicon, Oxford, UK*) analyses software. Average value of displacement registered of 5 separate impacts was calculated and used as a result.

Results:

Displacement at the height of 155 cm (public shielding pane):

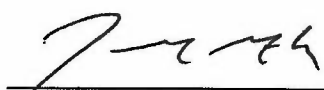
50.4 mm measured (48 – 66 mm required).

Displacement at the height of 110 cm (top sill of the dasher board element):

22.2 mm measured (18 – 30 mm required).

Certified by

University of Jyväskylä, Department of Biology of Physical Activity, date June 26, 2014


Jänne Avela, Professor, PhD


Piritta Poutiainen, M Sc, scientist



Postal address:
P.O. Box 35 (VIV)
FI-40014 University of Jyväskylä
Finland

Street address:
Rautpohjankatu 8
40700 Jyväskylä

Telephones:
Head +358 14 260 2076
Office +358 14 260 2070
Telefax +358 14 260 2071