

# 2021 STANDARD FOR PROTECTIVE HEADGEAR

For Use in Equestrian Activities

Supplemental Chin Bar Requirements

## ***FOREWORD***

Equestrian helmets may be configured with chin bars, a rigid element passing from left to right across the lower part of the wearers face and which may provide a measure of protection against injuries to the jaw and dentition. This addendum to the Snell E2021 Standard for Protective Headgear for Use in Equestrian Activities specifies additional requirements and test procedures for helmets configured with chin bars.

Chin bar test requirements in this addendum are similar to those set in Snell's standards for auto racing and motorsports headgear. However, unlike these other Snell standards which require that chin bars be an integral part of the helmet, the chin bars of equestrian helmets may also be removable.

If the chin bar is removable, the helmet must meet all the requirements of the base standard with and without the chin bar in place. In addition, the means by which the chin bar is attached to the helmet must be reasonably secure and simple in order to avoid error and misuse.

Helmets which meet the letter of these requirements but which still raise concerns about their safety and effectiveness will be referred to members of the Foundation's Board of Directors for evaluation. Any cause considered to reduce the protective capacity of the headgear, whether explicitly mentioned in this Standard or not, will be a cause for rejection.

## 1. Labeling

In addition to the labels required by E2021, helmets equipped with non-integral chin bars and qualified according to this addendum must include labeling **“Certified as full face with chin bar”** and **“Removal of the chin bar reduces facial protective capabilities of this helmet”** indicating that the helmet meets the Chin Bar test requirements.

Each helmet must include written instruction detailing the proper installation or removal of non-integral chin bars.

## 2. Samples Required

Each submission of helmets for certification requires that all samples include the chin bar. For removable chin bars, samples may be tested with and without the chin bar intact.

## 3. Chin Bar Test

The chin bar test applies to full face helmets only. At least one helmet in each certification series shall be tested. The helmet shall be firmly mounted on a rigid base so that the chin bar faces up and the reference plane is at  $65 \pm 5^\circ$  from horizontal. A mass of  $5 \pm 0.2$  kg with a flat striking face of  $0.01 \text{ m}^2$  minimum area shall be dropped in a guided fall so as to strike the central portion of the chin bar with an impact velocity of  $3.5 \pm 0.2$  m/sec. The maximum downward deflection of the chin bar must not exceed 60 mm nor shall any component fail so as to cause a potential injury to the wearer.