



Designation: F3237 – 23

Standard Terminology Relating to Snow Sport Freestyle Terrain Park Jumps¹

This standard is issued under the fixed designation F3237; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This terminology covers the terms required to describe a cross sectional profile of a snow sport freestyle terrain park jump and related parameters for a jumper using the feature and does not cover any other terrain park feature.

1.2 The terms are presented in a sequence considered to be the most logical with definitions presented later calling upon those presented earlier. This terminology standard does not require the use of any specific units; Imperial units (feet, seconds, degrees) or metric units (meters, seconds, degrees) can be used.

1.3 The depictions used in this standard are intended to aid in understanding the definitions and are not intended to depict or describe how any particular terrain park jump or its component features should be designed, built or maintained. Some terrain park jumps may use different configurations or combinations of features, or they may not incorporate all of the features depicted or defined in this standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with the use of snow sport terrain park features. Snow sports and the use of terrain park features involve inherent risks, and a terrain park feature that complies with all applicable standards or guidelines cannot eliminate all risks associated with terrain park features. Therefore, it is to be clearly understood that compliance with these applicable standards or guidelines in no way guarantees that injury can be prevented.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Significance and Use

2.1 A standard terminology is needed to allow freestyle terrain park designers, builders, ski resorts, accident

¹ This terminology is under the jurisdiction of ASTM Committee F27 on Snow and Water Sports and is the direct responsibility of Subcommittee F27.70 on Freestyle Terrain Jump Features.

Current edition approved July 1, 2023. Published August 2023. Originally approved in 2018. Last previous edition approved in 2018 as F3237 – 18. DOI: 10.1520/F3237-23.

investigators, and scientists to use a common language in describing freestyle terrain park jumps and related parameters for a jumper using the feature.

2.2 Angles are taken with respect to horizontal, with positive values indicating an increase in elevation and negative values indicating a decrease in elevation along the path of travel for a terrain park participant using the jump.

3. Terminology

3.1 Refer to Fig. 1.

3.2 *Definitions:*

terrain park, *n*—designated area of a ski resort or other similar facility containing natural or man-made freestyle features such as jumps and jibs.

parent slope, *n*—sliding surface within the terrain park upon which the feature is placed or constructed. The parent slope angle may vary with position.

average parent slope, *n*—straight line approximation of the parent slope angle.

ground slope, *n*—natural or man-made surface underlying the parent slope.

average ground slope, *n*—straight line approximation of the ground slope angle.

jump, *n*—man-made feature that allows a user an opportunity to become airborne, generally consisting of the jump elements given below.

jumper or jumper system, *n*—a skier or snowboarder and his or her equipment.

jump elements, *n*—parts of a jump which may include the following (refer to Fig. 1, labels in italics indicate the points on the sliding surface):

approach (a-b), *n*—downhill sloping surface leading into the approach transition.

approach transition (b-c), *n*—surface connecting the approach (*b*) to the area where the slope is horizontal. The approach transition starts where the surface angle is 75 % of the steepest approach angle, and ends where the surface angle departs zero (horizontal) closest to the lip (*c*).