

Guidelines for the use of straw bales in motorsport

- 1. The use of straw bales may be considered as a means of creating a barrier to absorb impact energy and/or to distribute the impact over a larger area. They are typically used to reduce the potential for injury to participants during impacts with trees and other obstacles on rally and hill-climb courses but are not recommended for closed circuit racing.
- 2. Bales are readily available in many countries, in a number of shapes either cylindrical or rectangular.
- 3. Cylindrical bales are to be stood with the axis vertical and precautions should be taken to guard against the possibility of an impacting vehicle pushing the bales out of position so as to expose an obstacle.
- 4. Rectangular bales should have at least one dimension exceeding 2,000mm.
- 5. Bales typically weigh 300 600kg. In anticipated head on impact situations the incorporation of a suitable air gap between the obstacle and the bale barrier should be considered in order to incorporate a degree of energy absorption by means of momentum transfer.
- 6. It is of advantage if the straw is perpendicular to the expected direction of impact: this can absorb up to four times the energy compared to other orientations.
- 7. Dry straw absorbs more energy than wet straw.