



## Gore Rain Tower

### Key Information:

#### Proves the waterproofness of GORE-TEX® Technical Garments

The Gore rain tower is the most important test method to ensure that GORE-TEX® Technical Garments are waterproof under even the most difficult practical conditions. All styles of GORE-TEX® Technical Garments must endure simulated hours of rain before going into production.

This extreme test exposes sample garments to a range of rain conditions – from moderate to heavy, vertical and wind driven – while worn by a rotating mannequin equipped with sensors to detect any leakage. If leaks are detected, construction and functional design is rejected or modified to improve its performance until it passes.

The wearer benefits from the highest quality of GORE-TEX® Technical Garments with lasting protection against rain.

### Bullet Points:

- First controlled rain test for the waterproofness of finished garments
- Moisture sensors at critical points beneath the clothing measure incoming moisture and indicate any area in the clothing's construction that is not waterproof
- Possible to simulate different types of rain
- Different from the EN 14360 test conditions, there are proven pass/fail criteria

### Description:

More than 20 years ago, Gore installed their rain tower, the first high-performance textile manufacturer in the world to do so. This enabled the first controlled and reproducible rain test for the waterproofness of finished garments. In order to simulate rainfall as closely as possible, GORE-TEX® Technical Garments are pre-washed, put onto a test manikin, and then exposed to artificial rain. Moisture sensors at critical points beneath the clothing such as at the shoulders, chest, wrist, stomach, back and front closure, measure in-coming moisture, and indicate any area in the clothing's construction that is not waterproof. A special software records the test's progress. By varying the time, amount of water and the droplet size it is possible to simulate different types of rain ranging from a dense drizzle to a heavy cloudburst. Additional side nozzles simulate windblown rain or storm conditions.