

## Operation of screening systems in conjunction with snow and ice

### Scope

The following information relates to all manual and automatic shading systems manufactured by Hawa AG.

### Causes of system blockages

Frozen guiding elements, drives and hinges are the most frequent causes of a blocked system.

Snow and ice can block the movement of guiding elements, trolleys and hinges in low temperatures. The middle hinges on folding/sliding systems are exposed when the system is open and therefore susceptible to icing. Heavy snowfall or snow drifts can cause large quantities of snow to collect in top tracks and guide channels. This can cause drain holes to freeze over and prevent water from draining. The system can become blocked as a consequence.

### Operating frozen or blocked systems

The shading systems are of high technical quality and designed for a long service life. Handling blocked systems carefully and carrying out routine maintenance are prerequisite.



#### Note

It is prohibited to operate systems when external temperatures fall below the minimum permissible operating temperature.

Operating frozen systems either manually or electrically can result in damage to the system.

Excessive force can damage the guiding and locking elements of manually operated systems.

Automated systems may sustain drive unit damage through repeat start-up attempts. Systems operated by a timer or automatic programme without a frost and moisture detector are particularly at risk.

### Prevention of frost damage

Make sure that the top tracks and guide channels are free from ice and snow before operating the system after an extended period of non-use, intensive snowfall or snow drifts.

Close the system if extreme weather conditions such as blizzards, snow drifts, plunging temperatures, sleet, etc., are forecast.

Switch off automatic control if there is a risk of frost. The control unit should not be switched on again until the system is free from snow and ice.

Instruct the persons responsible for the system accordingly.

### Automatic electronic frost protection

An automatic electronic frost detector can afford considerable protection against freezing. These devices measure temperature and precipitation. The frost detector closes the system if limit values are exceeded. However, even automatic frost detection cannot provide absolute protection in extreme weather conditions.

### Liability for frost and snow damage

Operating the system in extreme weather conditions occurs at the user's own responsibility.

The user is obligated to introduce whatever measures are necessary to protect the system from damage or destruction.

The supplier shall not be liable for any damage caused by manual or automatic operation of the system.