AN ROINN TALMHAÍOCHTA BIA AGUS MARA
DEPARTMENT OF AGRICULTURE FOOD AND THE MARINE

MINIMUM SPECIFICATION FOR RETROFITTING ROOF CLEAR SHEETS (ROOFLIGHTS) WITH SAFETY GRID.

The receiving of this specification does not imply approval of a grant application. However, if written approval is issued, then this specification becomes part of the contract between the applicant and the Department of Agriculture Food and the Marine.

This is a minimum specification. Where the word "SHALL" is used, then that standard (at least) **must** be followed in grant-aided buildings. Where a procedure is "RECOMMENDED", this is advice only on good practice.

Note that all references to other Department Specifications are to the current edition of that specification [available on the Department of Agriculture, Food and the Marine's Website (www.agriculture.gov.ie) under Farm buildings]. Similarly, references to Standards are to the current edition of the Irish, British or European Standard, as appropriate.

1 Safety

1.1 Responsibility for Safety

Applicants are reminded that they have a duty under the Safety, Health, and Welfare at Work Act 2005 to provide a safe working environment on the farm, including farm buildings, for all people who may work on that farm. There is a further duty to ensure that any contractor, or person hired to do building work, provides and/or works in a safe environment during construction.

1.2 Safety during Construction

Farmer/Applicant Responsibility: Please note that neither the Minister nor any official of the Department shall be in any way liable for any damage, loss or injury to persons, animals or property in the event of any occurrence related to the development and the applicant shall fully indemnify the Minister or any official of the Minister in relation to any such damage, loss or injury howsoever occurring during the development works.

Dangers: Where the applicant/farmer is undertaking any part of the above work, it is his/her responsibility to seek competent advice and to undertake all temporary work required to ensure the stability of excavations, superstructure, stanchion foundations, wall foundations, to guard against possible wind damage and to avoid any other foreseeable risk. It is also his/her responsibility to ensure that any drains, springs or surface water are diverted away from the works.

Power lines: Due to the complex criteria involved, where buildings are proposed within 35 metres of the centre of any overhead power line, the landowner shall contact ESB Networks in advance to ascertain the specific minimum building clearance requirement. It is a requirement on landowners under The Electricity Supply Acts to notify ESB Networks, at least, two months before commencement of any construction works near overhead lines. As a guide, the table below set out the usual minimum

clearance distances required, however, ESB Networks shall be contacted and their advice followed for any structure within 35m of the centre line of an overhead power line. ESB will provide landowners with written confirmation of the required clearances. Landowners can contact ESB through Phone Numbers provided on their Electricity bills.

Where building work is undertaken near power lines there is also a safety issue regarding Machinery, Tipper Trucks and Elevators operating without proper safety measures in place. When landowners contact ESB they will be provided with relevant safety literature.

Table 1: In general the following clearances apply to various voltage levels.

Voltage	**Clearance**
Low Voltage	0.5 to 3 Metres
Medium Voltage	3 to 6 Metres
38KV Lines	10 to 17 Metres
110kv Lines	23 Metres
220KV Lines	30 Metres
400KV Lines	35 Metres

Note:

- ESB overhead lines consist of lines at various voltage levels and require specific safety clearances from buildings depending on voltage level and construction type.
- Clearances are specific to the line voltage, building height, location in line span and ground levels.

Danger to children: It is the applicant's responsibility to prevent children from playing or spending time in the vicinity of any construction work.

1.3 Safety Notices

It is strongly recommended that all agricultural roofs have a safety sign warning that the roof is fragile. While roofs are non-fragile when installed, they may become fragile over the lifetime of the roof. Figure 1 shows an example of a typical fragile roof warning sign.

Figure 1: Typical fragile roof warning sign.

1.4 Roof work

When working on any roof, it is essential to assume that the roof is fragile, unless confirmed otherwise by a competent person.

The HSA Code of Practice for Safety in Roofwork shall be consulted prior to any work being undertaken on a roof. All advice in the code of practice shall be followed.

The HSA code of practice gives recommendations and practical guidance on how to work safely on roofs, including the safe maintenance of roof mounted plant and services, and how to design and plan for safe working. It offers guidance on the design and construction of roofs on new buildings and the maintenance, cleaning and demolition of existing roofs. All work at height poses a risk and a risk assessment should be carried out to assess those risks and put appropriate controls in place.

2 Safety Grid

2.1 Grid Location

The safety grid shall be placed underneath the clear light and on top of the supporting purloins. This means that the purloins will be able to directly support any weight placed on the grid.

2.2 Grid Size

The grid shall consist of 16mm diameter steel bars, running for the full length of the clear sheet. The bars shall be spaced at not greater than 150 mm intervals across the width of the clear sheet. Alternatively, 12mm bars may be used at not greater than 125mm spacing.

2.3 Protection of steel

All bars shall be hot-dip galvanised in accordance with IS EN ISO 1461:2009 to a minimum average coating weight of 610gr/m^2.

2.4 Grid Support

At the top purloin (highest purloin) the bar shall be bent into a L-shape, with the leg of the L pointing towards the ground so as to prevent the bar from sliding over the purloins. Each bar shall be rigidly secured to each purloin (e.g: using a galvanised metal strap) so that it cannot move from side to side. The fixings shall be corrosion resistant. Each bar of the safety grid must be fixed independently of the clear sheet.

It is recommended that the safety grid is fitted from underneath the roof structure using suitable lifting equipment, such as a cherry picker. If it is necessary to access the top of the roof, then crawler boards shall be used.

2.5 Proprietary Systems

Alternative proprietary safety grids may be permitted subject to prior acceptance by the Department of Agriculture, Food and the Marine.

3 Related Department Specifications

The current edition of the specifications listed below shall also be followed as required:-

1) 'S101: Minimum Specifications for the Structure of Agricultural Buildings'.
2) 'S102: Minimum Standards for Roof Cladding and Side Cladding'.

Copies of this and other relevant Department specifications are available on the department website at: www.agriculture.gov.ie under farm buildings or by contacting the one of the local offices of the Department of Agriculture, Food and the Marine.