



Irish Agricultural Supply Industry Standards

Requirements for the Design and Construction of Pesticides Stores

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IASIS Ltd., 31A Ravens Rock Road, Sandyford Industrial Estate, Dublin 18



+353 (0)1 293 0021



+353 (0)1 293 0109



info@iasis.ie



<http://www.iasis.ie>

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1 Introduction

- 1.1 Irish Agricultural Supply Industry Standards (IASIS Ltd)¹ (formerly known as BASIS²) is an independent company established jointly in 1993 by the Animal and Plant Health Association (APHA) representing manufacturers of plant protection products and veterinary medicines, and the Federation of Agrochemical Retail Merchants (FARM) representing retailers of plant protection products. It is run by a Committee with representatives from the Department of Agriculture, Food and the Marine (DAFM), the Health and Safety Authority (HSA), Teagasc, the Agricultural Science Association (ASA), Professional Agricultural Contractors (PAC), the Agricultural Consultants Association (ACA), the Irish Pest Control Association (IPCA), APHA and FARM. In practice a representative of the Irish Tillage Consultants Association (ITCA) represents its parent organization the ACA.
- 1.2 IASIS has a two-fold mission:-
- a) the achievement of excellence in the training of advisors and retail distributors, thereby facilitating the sustainable distribution and use of pesticides and animal health products, and
 - b) ensuring that storage, display and sales facilities are designed and constructed in compliance with relevant statutory requirements and are managed and operated to achieve a high level of protection for workers and for the environment.
- 1.3 These requirements were prepared and issued by IASIS Ltd., to facilitate compliance by pesticide store operators, whether wholesale or retail distributors, with the provisions of legislation introduced to give effect to the package of European legislation on pesticides adopted in 2009^{3,4,5}.
- 1.4 **These requirements may also be of interest to end-users such as contractors, forestry enterprises, golfing organizations, local authorities, farmers, pest control service providers and others.**
- 1.5 The requirements specified in this document, together with the guidance provided in the IASIS Guidelines for the Management and Operation of Pesticide Stores, and the IASIS Requirements for the Fitting Out and Guidelines for the Management and Operation of Pesticide Display and Sales Areas have been deemed to be the standard determined by

¹ www.iasis.ie

² Basis (Registration ROI) Limited

³ European Communities (Sustainable Use of Pesticides) Regulations 2012 (S.I. No. 155 of 2012)

⁴ European Communities (Plant Protection Products) Regulations 2012 (S.I. No. 159 of 2012)

⁵ Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ No L309, 24 November 2009, p1; Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, OJ No L309, 24 November 2009, p71; Directive 2009/127/EC of the European Parliament and of the Council of 21 October 2009 amending Directive 2006/42/EC with regard to machinery for pesticide application, OJ No L310, 25 November 2009, p29; Regulation (EC) No 1185/2009 of the European Parliament and of the Council of 25 November 2009 concerning statistics on pesticides, OJ No L324, 10 December 2009, p1

the Minister of Agriculture, Food and the Marine in accordance with Regulation 13(3) of SI No 155 of 2012 for premises used for storage, sale and supply of pesticides.

- 1.6 In accordance with the provisions of S.I. No 155 of 2012³, pesticides may only be sold or supplied whether by wholesale or retail, from stores that comply with these requirements and the store is entered on the register of stores maintained by the Minister.

2 General Requirements

- 2.1 Pesticide stores must be dedicated to the storage of chemicals such as plant protection products, animal remedies, biocides, *etc.* Pesticide Stores can be adjacent to buildings, be attached to other buildings or comprise compartments within buildings but must either have separate entrances or separate exits to the open air.
- 2.2 Steel transport containers are not suitable and must not be used for storage of pesticides⁶, unless modified to comply with the requirements set out hereunder.
- 2.3 Pesticide stores must be separate from sales and other areas to which the public may have access. Pesticide stores must be segregated from areas used for storage or processing of food or feed and be designed to ensure the pesticides stored therein do not become contaminated by other pesticides or stock on the premises or cause such contamination.
- 2.4 Pesticide stores must not have residential accommodation over the storage area.
- 2.5 All pesticide stores must be designed and constructed to facilitate control of access and to prevent unauthorized access *e.g.* by passersby, customers, children *etc.*
- 2.6 The design and construction specification of pesticide stores, whether intended for wholesale, retail, contractor or end-user use, should be modulated to reflect the design capacity of the store:-
- a) Category A: capacity > 50,000 Litres/Kilograms, typically storage facilities used by wholesale distributors and retail distributors that have very large storage facilities,
 - b) Category B: capacity > 5,000 Litres/Kilograms but < 50,000 Litres/Kilograms, typically storage facilities used by retail distributors that have large storage facilities,
 - c) Capacity C: capacity > 1,000 Litres/Kilograms but < 5,000 Litres/Kilograms, typically storage facilities used by retail distributors that have limited storage facilities, and
 - d) Capacity D: capacity < 1,000 Litres/Kilograms, typically storage facilities used by retail distributors for occasional storage of small quantities.

⁶ The absence of ventilation and bunding, as well the absence of roof vents or a roof designed to fail in the event of fire, render transport containers unsuitable for use as pesticide stores.

3 Site Selection

- 3.1 New Category A and B pesticide stores must not be sited immediately adjacent to domestic properties, schools, hospitals, shopping areas, food manufacturing or storage premises, or other vulnerable premises.⁷ Subject to their being compliant with relevant planning laws, existing pesticide stores and new storage facilities for pesticides intended for non-professional use should, where relevant, be exempted.
- 3.2 New Category A and B pesticide stores must have access on at least two sides of the building for fire-fighting vehicles and other emergency vehicles. There must be easy access for pesticide delivery vehicles. Subject to their being compliant with relevant planning laws, existing pesticide stores and new storage facilities for pesticides intended for non-professional use should, where relevant, be exempted.
- 3.3 New pesticide stores must not be erected on sites having a known risk of flooding⁸. Subject to their being compliant with relevant planning laws, existing pesticide stores may, where relevant, be exempted.
- 3.4 New Category A, B and C pesticide stores must not be sited in environmentally sensitive areas such as areas designated as Natural Heritage Areas (NHAs), as Special Areas of Conservation (SACs)⁹, Special Protection Areas (SPAs)¹⁰ or where public water supplies, or a fishery, could be contaminated unless the bund capacity of the store specified in accordance with point 10 is increased to 190 % or a tertiary containment system is provided. Existing Category A, B and C pesticide stores sited in such areas must have a bund capacity of 190 % or a tertiary containment system.

4 Requirements for New Developments

- 4.1 Prior consultation with the following bodies and compliance with the requirements specified by them in accordance with relevant statutory arrangements is essential in the case of Category A and B pesticide stores to be newly constructed or newly designated as a pesticide store. The bodies to be consulted include:-
- a) The local planning authority (County Council, Borough Council or Corporation),
 - b) The local building control authority (County Council, Borough Council or Corporation),
 - c) The local fire authority (County Council, Borough Council or Corporation),

⁷ The objective is to ensure that the possibility of accidental exposure of children and other bystanders is precluded and that opportunity for accidental contamination of food or feed with pesticides is precluded.

⁸ The Office of Public Works, National Flood Hazard Mapping Website (<http://www.floodmaps.ie/>) together with local knowledge should be relied upon for the identification of sites having a known risk of flooding

⁹ Special Areas of Conservation are areas designated as such in accordance with Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. OJ No L 206 of 22 July 1992, p7 as amended

¹⁰ Special Protection Areas are areas designated as such in accordance with Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, OJ No L 20 of 26 January 2010 p7 as amended

- d) The local environmental health office (County Council, Borough Council or Corporation),
 - e) The local Gardai in relation to security matters,
 - f) The Health and Safety Authority, in relation to worker safety issues (LoCall 1890 289 389; email wcu@hsa.ie),
 - g) The Insurance Company that provides or will be asked to provide cover.
- 4.2 Category A pesticide stores, depending on the quantities of dangerous goods stocked, may be subject to legislation on control of major accidents¹¹. Additional planning restrictions apply to premises subject to those regulations. The Health and Safety Authority should be consulted to establish the particular requirements arising, if any, for each store (LoCall 1890 289 389; email wcu@hsa.ie).

5 Store Capacity

- 5.1 The store must be large enough to accommodate the maximum quantities of pesticides planned for storage (peak periods). A minimum of a further 15 percent capacity must be included to allow for contingencies and future needs.

6 Chemical Storage Cabinets and Cages

- 6.1 Bunded and ventilated steel cabinets serving as pesticide stores, that are manufactured in compliance with the requirements set out herein, and subject to being maintained in good condition, can comply with the requirements set out hereunder.
- 6.2 Storage cabinets or cages must not be located in domestic dwellings, staff rooms or offices or areas where food or feed is stored or processed and must be secure or be located in a secure area.

7 Design and Construction of Floors

- 7.1 The floors of pesticide stores must be made of impermeable material and be free of cracks. All joints must be sealed.
- 7.2 Pesticide stores must not have internal drains that transfer outside the bund unless to a tertiary containment system.
- 7.3 The floors of pesticide stores must have smooth anti-slip surfaces.
- 7.4 The floors of pesticide stores must be capable of being easily cleaned and be resistant to chemical attack.

¹¹ European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2006 (S.I. No. 74 of 2006)

8 Design and Construction of Walls

- 8.1 The walls of pesticide stores must be constructed of impermeable material and to prevent leakage, be free of cracks to at least the height of the bunding.
- 8.2 The walls of pesticide stores that form a compartment within a larger building or warehouse must be carried full height to the underside of the roof or alternatively a one-hour fire resistant roof must be provided (BS 476).
- 8.3 The external walls of Category A and B pesticide stores that form internal walls within a larger building or warehouse, must be fire separated from the remainder of the building or warehouse and have a minimum of one-hour fire resistance (BS 476).

9 Design and Construction of Roofs and Rainwater Systems

- 9.1 The roofs of pesticide stores must be of impermeable material.
- 9.2 The roofs of pesticide stores can either have translucent panels that are designed to fail in the event of fire to release toxic fumes / smoke or have smoke vents. Alternatively, smoke vents and / or translucent panels that are designed to fail in the event of fire to release toxic fumes / smoke to the open air can be installed in tall buildings under roof level on external walls.
- 9.3 For new pesticide stores, rainwater downpipes must be external to the store and feed to a surface water drainage system that is compliant with the national building regulations¹². For existing pesticide stores, any internal rain water downpipes, entering drains at floor level, must be sealed into the floor. The downpipes must be encased in concrete to roof level, to avoid contaminated fire water passing down into the drains in the event that downpipes fail during a fire.

10 Design and Construction of Bunds

- 10.1 All pesticide stores must be provided with a permanent bund designed to retain at least 120 % of design storage capacity¹³ - 190 % of design storage capacity in the case of pesticide stores located in environmentally sensitive areas unless a tertiary containment system is provided (*cf* point 3.4).
- 10.2 The bund must be constructed using impermeable material, be integrated with the floor, be free of cracks and be resistant to chemical attack. All joints must be sealed.

¹² Building Control Act 2007 (No 21 of 2007); The Building Control Regulations 1997-2009 (SI No 496 of 1997, SI No 10 of 2000, SI No 85 of 2004, SI No 351 of 2009, SI No 352 of 2009); The Building Regulation 1997-2009, (SI No 497 of 1997, SI No 249 of 2000, SI 441 of 2000, SI No 284 of 2002, SI 872 of 2005, SI 666 of 2006, SI 854 of 2007, SI 229 of 2008, SI 259 2008, SI No 566 of 2009)

¹³ Collecting channels could be constructed in the floor of the pesticide store and be covered with a metal grid. Three or more such collecting channels could be connected to an underground sump, which in turn could be connected to a completely sealed underground collecting tank, on the outside of the building.

- 10.3 Existing pesticide stores must if necessary be adapted to ensure compliance with points 10.1 and 10.2 ¹⁴.

11 Design and Construction of Doors and Emergency Exits

- 11.1 The main entrance must be high and wide enough to accommodate the handling system to be used *e.g.* fork-lift.
- 11.2 All external doors must slide sideways, upwards or open outward.
- 11.3 Fire exit doors which must provide direct access to the open air, must open outwards and be fitted with panic bolts and otherwise comply with the provisions of relevant legislation ¹⁵.
- 11.4 Doors that separate a pesticide store from the remainder of a larger building or warehouse in which it is sited must have one-hour fire resistance (BS 476).
- 11.5 All external doors of pesticide stores must be capable of being securely locked. External doors must be designed to remain locked at all times when authorized personnel are not present.
- 11.6 Category A, B and where appropriate Category C pesticide stores must have at least one fire / emergency exit located at the opposite side / end of the store, such that store operatives are at all times within 25 metres of an exit. Emergency exits must be available and be useable at all times.

12 Design and Construction of Windows

- 12.1 New pesticide stores should not have windows. However, smoke vents or translucent panels that are designed to fail in the event of fire to release toxic fumes / smoke to the open air can be installed in tall buildings just under roof level on external walls.
- 12.2 The windows, if any, of existing pesticide stores must be shaded to prevent sunlight from heating chemicals being stored and causing them to degrade and must be barred to restrict / prevent unauthorized entry.

¹⁴ Main doorways can have a sloped concrete ramp laid across them, sealed to the walls at the edges of doorways. Side doors, fire exit doors or internal office doors should have breeze or concrete block walls laid across them and be sealed. Alternatively a breeze block or sealed steel three sided wall can be constructed to avoid any alteration of the door height allowing the door to open into or out of this space, as appropriate. All ramps and doorway walls should be to the same height and all entrances and exits must be banded. Banding will not provide water retention unless all water escape points are sealed. The slope of ramps should not exceed 1 in 12.

¹⁵ Safety, Health and Welfare at Work (General Application) Regulations 2007 (SI No 299 of 2007)

13 Design and Construction of Lighting, Heating and Electrical Fittings

- 13.1 Stores must be illuminated naturally or artificially to a level of at least 100 lux.
- 13.2 Category A and B pesticide stores must be provided with emergency lighting in compliance with IS 3217¹⁶ as well as lighted signs that indicate the location of emergency exits.
- 13.3 Category A and B pesticide stores, other than those used for pesticides for non-professional use, must contain a frost proofed compartment or section with a thermostatic control system for the storage of products identified by manufacturers / suppliers as being products that degrade at low temperatures.
- 13.4 All electrical fittings and wiring must, where relevant, be compliant with the ATEX Directives¹⁷ and the Electro-Technical Council of Ireland Limited¹⁸ rules for electrical installations.

14 Design and Construction of Ventilation Facilities

- 14.1 Adequate high level and low level ventilation, whether natural or mechanical, must be provided.
- 14.2 Low level ventilation must be placed above the level of the bunding.

15 Design and Construction of Shelving / Racking

- 15.1 Racking where provided must be constructed using corrosion resistant impermeable materials and must conform to EN 15512:2009¹⁹.
- 15.2 Shelving where provided must be constructed using corrosion resistant impermeable materials. **Timber shelving must not be used.**

¹⁶ I.S. 3217 : 1989 Code of practice for emergency lighting

¹⁷ Directive 94/9/EC of the European Parliament and the Council of 23 March 1994 on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres. OJ L 100, 19.4.1994, p. 1, amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29 September 2003, OJ L 284, 31.10.2003, p. 1, corrected by Corrigendum, OJ L 21, 26.1.2000, p. 42; and by Corrigendum, OJ L 304, 5.12.2000, p. 19. and

Directive 1999/92/EC of the European Parliament and of the Council of 16 December 1999 on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres (15th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) OJ No25 of 28 January 2000, p57

¹⁸ Electro-Technical Council of Ireland Ltd, ETCI Offices, Unit H12, Centrepoint Business Park, Oak Road, Dublin 12, Ireland. Tel :+353-1-4290088 , Fax :+353-1-4290090, Email : info@etci.ie

¹⁹ EN 15512:2009: Steel static storage systems. Adjustable pallet racking systems. Principles for structural design

16 Design and Construction of Decontamination Facilities

- 16.1 Emergency eye wash / shower facilities must be provided at or near the store entrance, but within the bunded area of Category A, B and C stores used for storage of pesticides for professional use. The number and nature of emergency eye wash / shower stations provided, should be determined following consultation with the Health and Safety Authority (LoCall 1890 289 389; email wcu@hsa.ie).
- 16.2 Water pipes supplying emergency eye wash / shower facilities must be insulated to ensure that the facilities concerned work satisfactorily in sub-zero temperatures.
- 16.3 There must be a source of running water readily available in or adjacent to the store for emergency use. A potable water supply must also be available.

17 Design and Construction of Sanitary Facilities

- 17.1 There must be separate rooms at or near Category A and B stores used for storage of pesticides for professional use that contain adequate washing / shower / toilet facilities external to the bunded area for both male and female operatives.

18 Design and Construction of Intrusion, Fire Detection and Alarm Systems

- 18.1 Category A and B pesticide stores must be fitted with monitored and serviced intrusion and fire alarm systems that conform to IS 3218 ²⁰.
- 18.2 Fire points sited adjacent to each exit from Category A, B and C pesticide stores must be clearly indicated or identified. Fire points consist of a suitable fire extinguisher, break glass fire alarm call point, fire notice and any other equipment necessary and specified by the local fire service for use in the event of a fire.
- 18.3 Fire extinguishers manufactured in accordance with EN3 ²¹ and maintained in accordance with IS 291 ²² must be provided for Category A, B, and C pesticide stores and be suitably located to facilitate their use. The equipment and facilities provided must comply with Regulation 13 of the Safety, Health and Welfare at Work (General Application) Regulations ¹¹. The number, type and location of the equipment to be provided must be determined in consultation with the local fire authority (County Council, Borough Council or Corporation).

²⁰ IS 3218: 1989 Fire Detection and Alarm Systems for Buildings – System Design, Installation, Servicing and Maintenance

²¹ EN3 European Standard for fire extinguisher manufacture

²² IS 291: 2002 Irish Standard for fire extinguisher maintenance

19 Signage

- 19.1 The following signage must be displayed externally in a prominent position at the entrance to pesticide stores and, where relevant, at the entrance to the building or warehouse in which the pesticide store is located:-
- 19.1.1 Warning sign BS5378 series (black and yellow triangle incorporating an exclamation mark),
- 19.1.2 A sign saying ‘in case of emergency dial 112 or 999’,
- 19.1.3 A sign saying ‘Pesticide Store, Authorized staff only. No Smoking’.
- 19.2 To avoid accidents, hazards must be clearly indicated using appropriate signage as specified in the Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007 (Amended May 2010) (Chapter 1 of Part 7: Safety Signs at Places of Work)²³.

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http://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Safety_Signs_at_a_Place_of_Work_2010.pdf

20 Summary of Requirements by Store Category

Nº	Requirement	Category A	Category B	Category C	Category D
2	General Requirements				
2.1	Store must be dedicated to storage of chemicals and have entrance(s) and exit(s) to open air.	✓	✓	✓	✓
2.2	Steel Transport Containers prohibited.	✓	✓	✓	✓
2.3	Store must be separate from sales areas & have restricted access; Store must be segregated from food & feed.	✓	✓	✓	✓
2.4	There must not be residential areas over storage areas.	✓	✓	✓	✓
2.5	Store must be designed / constructed to facilitate control of access.	✓	✓	✓	✓
2.6	Design/construction must be modulated by category.	✓	✓	✓	✓
3	Site selection				
3.1	Store must not be cited adjacent to houses, schools, hospitals, shopping areas, food manufacturing or storage premises, or other vulnerable premises.	New Stores: ✓	New Stores: ✓	Not Required	Not Required
		Existing Stores / Stores for amateur products: Can be exempted if planning law compliant	Existing Stores / Stores for amateur products: Can be exempted if planning law compliant	Not Relevant	Not Relevant
3.2	Access must be provided on 2 sides for fire-fighting & other emergency vehicles. There must be easy access for delivery vehicles.	New Stores: ✓	New Stores: ✓	Not Required	Not Required
		Existing Stores / Stores for amateur products: Can be exempted if planning law compliant	Existing Stores / Stores for amateur products: Can be exempted if planning law compliant	Not Required	Not Required
3.3	Stores must not be on sites known to have a risk of flooding.	New Stores: ✓	New Stores: ✓	New Stores: ✓	New Stores: ✓
		Existing Stores: Can be exempted if planning law compliant	Existing Stores: Can be exempted if planning law compliant	Existing Stores: Can be exempted if planning law compliant	Existing Stores: Can be exempted if planning law compliant
3.4	Stores must not be on sited in environmentally sensitive areas.	New Stores: ✓	New Stores: ✓	New Stores: ✓	Not Required
		Existing Stores must have with a bund capacity of 190% or tertiary containment, exempt	Existing Stores must have with a bund capacity of 190% or tertiary containment, exempt	Existing Stores must have with a bund capacity of 190% or tertiary containment, exempt	Not Required
4	Requirements for New developments				
4.1	Consultation with relevant public bodies and	✓	✓	Not Relevant	Not Relevant

N ^o	Requirement	Category A	Category B	Category C	Category D
	compliance with the requirements specified by them required for newly constructed or designated stores.				
4.2	Store may be subject to legislation on control of major accidents.	✓	Not Relevant	Not Relevant	Not Relevant
5	Store Capacity				
5.1	Store capacity must accommodate 115% of peak storage requirement.	✓	✓	✓	✓
6	Chemical Storage Cabinets and Cages				
6.1	Bunded & ventilated steel cabinets that comply with the requirements specified are acceptable.	✓	✓	✓	✓
6.2	Storage cabinets or cages must not be located in domestic dwellings, staff rooms or offices or areas where food or feed is stored or processed and must be secure or in a secure area.	✓	✓	✓	✓
7	Design and Construction of Floors				
7.1	Store floors must be of impermeable material, be free of cracks. All joints must be sealed.	✓	✓	✓	✓
7.2	Stores must not have internal drains that transfer outside the bund unless to a tertiary containment system.	✓	✓	✓	✓
7.3	Store floors must have smooth anti-slip surfaces	✓	✓	✓	✓
7.4	Store floors must be easily cleaned and be resistant to chemical attack.	✓	✓	✓	✓
8	Design and Construction of Walls				
8.1	Store walls must be of impermeable material, be free of cracks to at least the height of the bunding.	✓	✓	✓	✓
8.2	Store walls forming a compartment within a larger building must be carried full height to the underside of the roof or alternatively the roof must have 1-hour fire resistance (BS 476).	✓	✓	✓	✓
8.3	Store external walls forming internal walls of a larger building must have 1-hour fire resistance (BS 476).	✓	✓	Not Required	Not Required
9	Design and Construction of Roofs and Rainwater Systems				

N ^o	Requirement	Category A	Category B	Category C	Category D
9.1	Store roofs must be of impermeable material.	✓	✓	✓	✓
9.2	Store roofs can either have translucent panels designed to fail in the event of fire to release smoke/fumes or have smoke vents	✓	✓	✓	✓
9.3	Rainwater pipes of new stores must be external and feed to surface water drainage system compliant with building regulations.	✓	✓	✓	✓
	Rainwater pipes of existing stores, if entering drains at floor level must be sealed & be encased in concrete to roof level.	✓	✓	✓	✓
10	Design and Construction of Bunds				
10.1 & 10.3	Stores must be provided with a permanent bund to retain at least 120% of storage capacity (190% if located in environmentally sensitive area unless tertiary containment is provided).	✓	✓	✓	✓
10.2	Bunds must be of impermeable material, be integrated with the floor, be free of cracks & be resistant to chemicals. All joints must be sealed.	✓	✓	✓	✓
11	Design and Construction of Doors and Emergency Exits				
11.1	The main door must be high enough to accommodate the handling system used <i>e.g.</i> fork-lift	✓	✓	✓	✓
11.2	All external doors must slide sideways, upwards or open outward.	✓	✓	✓	✓
11.3	Fire exit doors must provide direct access to open air, open outwards & have panic bolts fitted	✓	✓	✓	✓
11.4	Doors that separate a pesticide store from the remainder of a large building must have 1-hr fire resistance (BS 476)	✓	✓	✓	✓
11.5	All external doors must be capable of being securely locked. External doors must be designed to remain locked at all times when authorized personnel are not present.	✓	✓	✓	✓
11.6	Stores must have at least one fire / emergency exit located	✓	✓	Where Relevant	Not Relevant

N ^o	Requirement	Category A	Category B	Category C	Category D
	at the opposite side / end of the store, such that store operatives are at all times within 25 metres of an exit. Emergency exits must be available and be useable at all times.				
12	Design and Construction of Windows				
12.1	New stores should not have windows. However, smoke vents or translucent panels that are designed to fail in the event of fire to release toxic fumes / smoke to the open air can be installed in tall buildings just under roof level on external walls	✓	✓	✓	✓
12.2	The windows, if any, of existing stores must be shaded to prevent sunlight from heating chemicals being stored and causing them to degrade and must be barred to restrict / prevent unauthorized entry	✓	✓	✓	✓
13	Design and Construction of Lighting, Heating and Electrical Fittings				
13.1	Stores must be illuminated naturally or artificially to a least 100 lux.	✓	✓	✓	✓
13.2	Emergency lighting in compliance with IS 3217 & lighted signs indicating exit locations must be provided.	✓	✓	Not Required	Not Required
13.3	Stores must contain a frost proof compartment or section with thermostatic controls for storage of products that degrade at low temperatures	Professional product stores ✓ Not Required for Stores of Product for Amateur Use	Professional product stores ✓ Not Required for Stores of Product for Amateur Use	Not Required	Not Required
13.4	Electrical fittings & wiring must comply with the ATEX Directives & the Electro-Technical Council of Ireland Limited rules.	✓	✓	✓	✓
14	Design and Construction of Ventilation Facilities				
14.1	Adequate high and low level ventilation, natural or mechanical, must be provided.	✓	✓	✓	✓
14.2	Low level ventilation must be above the level of the bunding.	✓	✓	✓	✓
15	Design and Construction of Shelving / Racking				
15.1	Racking, if provided, must be corrosion resistant and	✓	✓	✓	✓

N ^o	Requirement	Category A	Category B	Category C	Category D
	impermeable conforming to EN 15512:2009				
15.2	Shelving where provided, must be constructed using corrosion resistant and impermeable materials – timber is not permitted.	✓	✓	✓	✓
16	Design and Construction of Decontamination Facilities				
16.1	Emergency eye wash / shower facilities must be provided near the store entrance but within the bunded area of stores for professional use products. Number and type to be decided following consultation with the HSA.	✓	✓	✓	Not Mandatory
16.2	Water pipes supplying emergency eye wash / shower facilities must be insulated.	✓	✓	✓	Not Relevant
16.3	Running water must be available in or adjacent to the store for emergency use. A potable water supply must also be available	✓	✓	✓	✓
17	Design and Construction of Sanitary Facilities				
17.1	Adequate washing / shower / toilet facilities external to the bunded area of stores for professional use products must be provided for both male and female operatives	✓	✓	Not Required	Not Required
18	Design and Construction of Intrusion, Fire Detection and Alarm Systems				
18.1	Monitored and serviced intrusion and fire alarm systems that conform to IS 3218 must be fitted	✓	✓	Not Required	Not Required
18.2	Fire points, consisting of a suitable fire extinguisher, break glass fire alarm, fire notice & any other equipment specified by the local fire service, must be provided adjacent to each exit be clearly indicated,	✓	✓	✓	Not Required
18.3	Fire extinguishers compliant with EN3, maintained in accordance with IS 291 must be provided and be suitably located to facilitate their use. The equipment and facilities provided must comply with the Safety, Health and Welfare at Work (General Application) Regulations.	✓	✓	✓	Not Required

N ^o	Requirement	Category A	Category B	Category C	Category D
	The number, type and location of the equipment to be provided must be determined in consultation with the local fire authority (County Council, Borough Council or Corporation)				
19	Signage				
19.1	<p>Signage must be displayed externally in a prominent position at the entrance to pesticide stores and, where relevant, at the entrance to the building or warehouse in which the pesticide store is located:-</p> <ul style="list-style-type: none"> • Warning sign BS5378 series (black and yellow triangle incorporating an exclamation mark), • A sign saying 'in case of emergency dial 112 or 999', • A sign saying 'Pesticide Store, Authorized staff only. No Smoking' 	✓	✓	✓	✓
19.2	To avoid accidents, hazards must be clearly indicated using signage specified in the Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007 (Amended May 2010) (Chapter 1 of Part 7: Safety Signs at Places of Work)	✓	✓	✓	✓