

**SELF-APPRAISAL/CHECK LIST FOR COLD STORAGES AS PER
I.S.3594 : 1991**

S.No.	Name of the Storage Buildings			
1	Name of Owner			
2	Address of the Owner and Storage Building.			
3	Total height of the storage building.			
4	Total number of floors in the building.			
5	Goods stored in the building, Hazardous/Non- Hazardous			
	TYPE OF CONSTRUCTION.			
*6	Whether the height of the building does not exceed 15 M	Yes	No	--
*7	Whether the Roadways alongside the godowns are 5 Mts. And above and the gates of 4.5 M wide as per clause (5.2 of I.S.3594:1991)	Yes	No	--
8	Whether the building used for Hazardous/Extra- Hazardous goods are as per type-I of the Fire Resistance grading as per clause (6.1 of I.S.3594:1991)	Yes	No	Not Applicable
9	Whether the building used for Non- Hazardous goods are as per type-II of the Fire Resistance grading 6.1 of I.S.3594:1991	Yes	No	NA
*10	Whether the single storey building is separated by walls into compartments and its compartments area is 750 M2 and below and its length and breadth is 40 M below as per clause 6.1.1 of I.S.3594:1991	Yes	No	--
*11	Whether heat insulation material used in Non-Combustible	Yes	No	--
*12	Whether the automatic fire alarm system conforming IS 2189:1988 is installed covering the area above false ceiling. (In the absence of sprinklers)	Yes	No	--
	SEPARATING WALLS		No	
13	Whether the separating walls are provided between a) A storage godown and a packing godown, b) A Non-Hazardous storage godown and a hazardous or extra hazardous or extra hazardous storage godown, and c) A hazardous storage godown and an extra hazardous godown 7.1 of I.S. 3594	Yes	No	NA
14	Whether the separating walls are provided between cold storage building and their air conditioning plant and other machine rooms as per clause 7.3 of I.S. 3594	Yes	No	NA
*15	Whether thermal barrier of at least 1.5 m above the level of each floor or stage is provided	Yes	No	--
*16	Whether the materials are stacked in such a way to minimize the internal spread of Fire, easy accessibility for fire fighting and salvage operations and portions of the material which in case of Fire may constitute an added hazard are removed easily as per clause 9.1.2 of I.S.3594	Yes	No	--
*17	Whether neat stacking and good house keeping are maintained	Yes	No	--

	at all times as per clause 9.1.3 of I.S.3594			
*18	Whether the racks, shelves and pallets are preferably be non combustible construction as per clause 9.1.6 of I.S.3594	Yes	No	--
*19	Whether concrete pit is on the ground at a finished place to collect all the waste materials like empty packing boxes, used cotton waste etc., as per clause 9.1.8 of I.S.3594	Yes	No	--
*20	Whether the passage ways or aisles are spaced that the total content of individual stacks do not exceed of 700 M ³ and in case of baled fibers or other combustible goods, however aisles are placed as intervals not exceeding 15 M 9.2.1.2. of I.S.3594.	Yes	No	--
*21	Whether the passageways or aisles are of sufficient width of minimum 2 M and is 2.5 where mechanical handling appliances are used as per clause 9.2.1.2. & of I.S.3594.	Yes	No	--
*22	Whether the aisles along side of the walls is of sufficient width to permit the passage of an employee as per clause 9.2.1.6 of I.S.3594:1991	Yes	No	--
*23	Whether the stack piled is 4.50 M and below in height in the absence of automatic sprinkler system as per clause 9.2.2.1 of I.S.3594	Yes	No	--
24	Whether the stack piled is 12 M and below presence of automatic sprinkler system as per clause 9.2.2.1 of I.S.3594	Yes	No	--
*25	Whether the clearance is 1 M and above between the top of the stack and ceiling projections like beams and grinder as per clause 9.2.2.1 of I.S.3594	Yes	No	NA
*26	Whether there is colour band painted on the walls indicating the maximum height as per clause 9.2.2.1 of I.S.3594	Yes	No	--
27	Whether there is 1 M clearance between sprinkler head and highest storage level as per clause 9.2.2.2. of I.S.3594	Yes	No	--
28	Whether goods are stored on a raised brick or concrete platform as per clause 9.3.1 of I.S.3594	Yes	No	NA
	FLOOR LOADS			
*29	Whether the floor load in a building is not exceeding as per original design as per clause 9.4.1. of I.S.3594	Yes	No	--
	SEGREGATION MATERIALS			
30	Whether the Hazardous, Extra- Hazardous and Non-Hazardous materials are segregated from each other as per clause 9.5.1 of I.S.3594	Yes	No	NA
31	Whether the materials which may be Hazardous in combination are stored separately in and segregated as per clause 9.5.2 of I.S.3594	Yes	No	NA
32	Whether the materials which emits large amount of smoke or toxic gases are stored in separate well ventilated godowns as per clause 9.5.3 of I.S.3594	Yes	No	NA
33	Whether the precautions are taken against propagation of fire from point, from floor to floor through stairs, lift wells, pipe or	Yes	No	NA

	ducts in case of solids at ordinary temperature but melt easily under of fire, materials like fats, warts sulphur, resins, bitumen, pitch, rubber and also in case of oils, spirits and flammable liquids as per clause 9.5.4 of I.S.3394			
34	Whether the storage of gas cylinder liable to explode when exposed to fire are stored in detached buildings segregated from all other storages by separating walls, as per clause 9.5.5 of I.S.3594	Yes	No	NA
35	Whether the contaminating commodities, such as poison, dyes, tanning extracts, gums and soda ash are not stored along with or on floor above food stuff storage as per clause 9.5.6 of I.S.3594	Yes	No	NA
36	Whether the fire hazard characteristics of stored materials are on hand as per clause 9.5.7 of I.S.3594	Yes	No	
37	Whether the exhaust system of mechanical equipment and mobile appliances are provided with spark arrestors as per clause 10.1.1.3 of I.S.3594	Yes	No	NA
	REFRIGERATING MACHINERY			
38	Whether the refrigeration equipment are as per the specification laid down in I.S.660:1963 and Electric wiring as laid down in I.S.695:1964. The same may be applicable for cold storage enclosures as per clause 10.2.1. of I.S.3594	Yes	No	NA
39	Whether the refrigerant used is of non-combustible nature as per clause 10.2.2. of I.S.3594	Yes	No	NA
	ELECTRIC INSTALLATIONS			
*40	Whether the installations and maintenance of Electrical wiring are compiled with the provision laid down in as per clause 11.1. of I.S.3594	Yes	No	--
*41	Whether the main switch with indicator lamp are provided near the entrance so that total power to cold storage could be cut off during fire as per clause I.S.3594	Yes	No	--
	LIGHTING WIRING			
*42	Whether the Electrical wiring other than that for portable lamps is in screwed steel conduits or 15 of mineral insulated copper or Aluminium sheathed cable with or without P.V.C. serving as per clause 11.2.1 of I.S.3594	Yes	No	--
*43	Whether the wiring in cold storage is be of mineral insulated copper or aluminium sheathed cable with or without P.V.C. serving as per clause 11.2.1 of I.S.3594	Yes	No	--
44	Whether the wiring in case of Fibrous goods, flammables liquids, nitro cellulose, fire works or explosives, all switches and control equipment is located out side the godown and all the portable lamps used is of 24 V with adequate protection, as per clause 11.2.2 of I.S.3594	Yes	No	NA
45	Whether the wiring in these cases is installed externally as far as possible, excepting for the stretches required for connection	Yes	No	NA

	to fitting as per clause 11.2.2.1 of I.S.3594			
46	Whether the lighting fitting in case of godowns with sprinkler system is either above the sprinkler heads or is not less than 30 Cm. Below that level as per clause 11.2.3 of I.S.3594	Yes	No	NA
47	Whether all light fitting are with minimum clearance of 75 Cm. Form highest stacking level as per clause 11.2.3.1 of I.S.3394	Yes	No	NA
	ILLUMINATION			
*48	Whether the godowns are with an illumination of at least as clause 50 lux 12.1.of I.S.3394	Yes	No	--
	FIRE FIGHTING ARRANGEMENTS			
49	Whether the automatic Fire alarm system is provided unless the godown be protected with an automatic sprinkler installation as per clause 13.1 of I.S.3394	Yes	No	NA
*50	Whether water supply system consisting of Fire Hydrants and static water tanks conforming IS 9668:1980 is provided for all storage building as per clause I.S.3394			
	(a) In storage building exceeding 750 M2 area.	Yes	No	NA
	(b) Out door storage area exceeding 200 M2 area.	Yes	No	NA
	(c) For smaller premises, especially those located over 8 Km from the nearest Fire Station, at least one static tank of not less than 125000 Lts. Capacity is present as per clause 13.1.2	Yes	No	NA
*51	Whether the buckets and portable chemical Fire extinguishers conforming to relevant Indian standards are provided in suitable locations in the vicinity in as per clause I.S 2190:1992 13.2. I.S.3594	Yes	No	--
*52	2 Nos. water type Fire Extinguishers of 9 Lts. Each per 600 M2 or part with minimum 4 Nos. per compartment coverage per extinguishers-15 Mts. Walking distance 2 Fire Buckets one with sand and other with water	Yes	No	--
53	Whether the godowns, warehouses exceeding 750 M2 in floor area are protected with a well-designed automatic sprinkler installation as per clause 13.4. I.S.3594	Yes	No	NA
*54	Whether the First Aid Fire Fighting equipment and all fixed fire protection system installed in the storage building area are subjected to periodical inspection and maintenance so as to ensure their proper functioning by an approved agency as per clause 13.4.I.S.3594	Yes	No	--
55	Whether the large storage installation consisting of several wear houses or godowns especially involve costly or hazardous goods or stores of vital national interest are provided with full time fire brigade having appropriate major fire fighting equipment as per clause 13.5.I.S.3594:1991	Yes	No	NA
*56	Whether the location of all fire fighting equipment like hydrant valve, landing valve, hand appliances etc. are indicated on the building plot plan and displayed prominently at the entrance of	Yes	No	--

	the godowns as per clause 13.6 I.S.3594:1991			
	GENERAL SAFETY PROVISIONS AND HOUSE KEEPING			
*57	Whether the following notices are displayed in prominent places as per clause I.S.3594			
	(a) Instructions to the staff (i) How to call the nearest Fire Brigade, and (ii) What to do in case of a fire breaking out in the premises			
*58	Whether the shutters of the door and window openings are made reasonably secure against entry of unauthorized persons 14.8 I.S.3594:1991			
59	Whether the temporary storage of commodity in the open is not allowed which obstructs access to godown doors, hydrant points and sprinkler valves as per clause 14.9 I.S.3594:1991			
60	Whether in bulk storage premises, a fire emergency plan laying out in detail the method of alerting and actions to be taken by different personnel of the premises in case of fire out break, and also the procedure for getting out side assistance is formulated as per clause 14.10 I.S.3594:1991			
	GENERAL			
61	No use of naked flames, welding, cutting and spray painting operations, should be allowed excepting in detached buildings specially set apart for those purpose, as per clause 14.2 I.S.3594			
62	Whether Fuel tanks for mobile material handling appliances should be filled any where excepting separate building for that purpose, as per clause 14.3 I.S.3594			
63	Whether godowns and compounds should be swept clean everyday and systematic removal of weeds from the compound shall be enforced, as per clause 14.5 I.S.3594			
64	Whether Every godowns should be thoroughly inspected before it is closed. If possible, all such godowns which were opened during the day should be reopened and re-inspected one hour after their closure after that they should be finally closed, as per clause 14.6 of I.S.3594			
65	Whether all Fire check doors should be kept shut off when not needed and after the end of days work. Vision slits may be provided (with proper security safeguards) in the external doors to enable the security staff on patrolling duty to promptly detect any out break of fire within the building, as per clause 14.7 I.S.3594			

Date:

Signature of the Owner/Occupier

Note: All safety measures shown with (* mark) are mandatory.