

Form- 1

Application form for Accreditation of Cold Storage Warehouse

(See clauses– 2 (1 iv), 3(2) and 12 of Warehousing Development and Regulatory Authority (Warehouse Accreditation) Regulation, 2011

To,
The Officer In-Charge,
Cold Storage Warehouse Accreditation Agency
.....
.....



Subject- Application for accreditation of cold storage warehouse

Dear Sir,

I, Mr./ Mrs./ Ms., age....., son of / daughter of / wife of....., Resident of village-.....taluka....., district..... State..... hereby apply for accreditation of / renewal of accreditation of cold storage warehouse named as....., situated at survey No.....village / town.....district....., State..... The particulars of the said cold storage warehouse are enclosed herewith as Section 1 to Section 5.

I /we hereby, declare that: (pl. strike out words or phrases mentioned below in *italics* which are not applicable)

- a. I am / we are proprietors of the cold storage warehouse; or, I am duly authorised representative of the applicant company* to make this application for *accreditation / renewal of accreditation* of the above mentioned cold storage warehouse,
- b. I am aware that the accreditation is as per provisions of the Warehousing (Development and Regulation) Act 2007 and rules framed thereunder. I, hereby, undertake to abide by all terms & conditions of accreditations / *renewal of accreditation*.
- c. All applicable laws and statutory requirements in relation to the warehouse for which the application is being submitted, are complied with.
- d. I / we hereby, solemnly declare that all information herein furnished are true to best of my / our knowledge and that in case it is proved to be untrue / false, I /we undertake to indemnify person or persons concerned in this business against any loss arising out of such false or untrue information and cancellation of accreditation.

Enclosures:

- 1.1 Demand Draft for the amount of application fee or proof of payment of prescribed application fee through electronic transfer of money towards application fee
- 1.2 In case a company is applicant, then attested Copy of Registration certificate of company
- 1.3 In case a Company* is applicant, then attested copy of Memorandum of Association and Articles of Association / Rules & Regulations
- 1.4 when a company* is applicant, then attested copy of resolution of Company for making application on its behalf for accreditation or its renewal under provisions of WDRA 2007 and Rules & Regulations made there under, indicating the full particulars of the person who is authorised to make application for accreditation
- 1.5 Original copy of authority to the person to make application as applicant on behalf of a company* for accreditation or its renewal under provisions of WDRA 2007 which need to be signed by CEO of the company* if the applicant himself is not the CEO of the applicant company*.
- 1.6 In case of application of renewal of accreditation, attested copy of last accreditation be enclosed.

Place-

Yours sincerely,

Date-

Signature of Applicant
Name of Applicant-
Profession.....
PAN NO. / Voter ID No. / UID No.....
Phone- No.....Cell No.....

*Company hereinafter referred to includes any legal person such as cooperative society, registered firm etc.

Section- 1

Description of Cold Storage Warehouse

{Ref. S. 2 (s) of the Warehouse Development and Regulation) Act, 2007}

1. Name of Cold Storage Warehouse
2. Postal Address of Cold Storage Warehouse.....
.....
.....
3. Location of Cold Storage Warehouse-
 - a. Survey No.....
 - b. Revenue Village / Town City-.....
 - c. Tahsil-.....
 - d. District-.....
 - e. State-.....
 - f. PIN Code-.....
 - g. At Site Phone No.-.....Fax No.....e-mail ID
4. Technical Audit report by engineer empanelled with accreditation agency to the effect of Installation being as per data sheet enclosed as Part-6:
 - a. Name and Registration No. of engineer empanelled with accreditation agency/ NHB / NCCD -
 - b. Date of issue of Registration Certificate-.....
5. Particulars of Industrial License (if applicable under local laws)-
 - a. Issuing Authority-
 - b. Period of Validity- from.....to.....
6. Particulars of cold storage License (If applicable under local laws)-
 - a. Issuing Authority-
 - b. Period of Validity- from.....to.....
7. No Objection Certificate from Pollution Control Board (if applicable under local laws)-
 - a. Issuing Authority-
 - b. Period of Validity- from.....to.....
8. Fire safety Certificate (if applicable under local laws)
 - a. Issuing Authority-
 - b. Period of Validity- from.....to.....
9. Particulars of NoC / approval by local planning authority for cold storage -
10. If the cold storage has been set up as per scientific design? If yes then tick the applicable option -
 - a. In accordance with technical standards prescribed by Department of Agriculture & Cooperation and under Govt. scheme. If so, particulars of scheme and letter of intent issued be quoted..... or,
 - b. In accordance with any other national or internationally recognised standard design practice based on heat load calculation keeping in view critical storage conditions of goods to be stored, energy efficiency, environmental concern, safety of work men and goods, automation in control etc.,then the design methodology followed must be quoted

Date-.....

Signature of Applicant

Place-.....

(Name of Applicant)

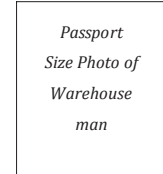
Section -2

Identity of Warehouseman and Capacity to Discharge Liability

[S. 2 (v), S. 6 of Warehouse (Development and Regulation) Act, 2007 and Clause 3 of the Warehousing Development and Regulatory Authority (Warehouse Accreditation) Regulation, 2011]

(In case of Individual or Proprietary Firm the identity details of individual or proprietor need to be given; for partnership firm the identity details of all partners be given by attaching separate sheets for each one of them and in case of Company* the identity details of Chief Executive Officer be given)

1. Name of Warehouseman- Mr. / Ms. / Mrs.....
2. Status of warehouseman- *Proprietor / Joint Owners / Partners / Chief Executive of the Company**
3. Number of joint owners / members of partnership firm (if applicable).....
4. Date of Birth of Warehouseman.....
5. Father's Name / Husband's Name.....
6. Contact Details of Warehouseman-
 - a. Residential Address.....
 - b. Telephone No.- () ()
 STD Code No.
 - c. Mobile No.....
 - d. E-mail Id.....
 - e. PAN No. for warehouse / warehouseman (as applicable).....
 - f. UID No. / Voter ID No. of warehouse man (if any).....
7. Type of title over Warehouse- Ownership / Lessee.....
8. Certified copy of *sale deed / lease deed* for site land
9. Particulars of copy of record of right showing title of warehouseman.....
10. Whether there is any charge on warehouse assets, if yes then details there for.....
11. Net worth of warehouse, Rs..... as on.....



Enclosures-

- 2.1 Attested copy of Audited Annual Account of the warehouse (for registered Company* the one filed with the Registrar be submitted)
- 2.2 Attested copy of acquisition deed (purchase, lease) for warehouse
- 2.3 Attested copy of record of right indicating right on land and immovable property of warehouse
- 2.4 Proof of adequate net worth of ware house (CA Certificate / Certificate of banker of warehouse)
- 2.5 Statement of details of any charge on warehouse (mortgage / attachment / pending litigation in respect of assets of the warehouse etc)
- 2.6 Attested Copy of latest Income Tax Return of warehouse-
- 2.7 Attested Copy of any other return filed with statutory authority (Licensing Authority / Service tax/ sales tax etc.)

Date-

Signature of Applicant

Place.....

* Company hereinafter referred to includes any legal person such as cooperative society, registered firm etc.

Section-3

Goods to be Stored, Storage Conditions and Insurance Cover

{Ref. Clause 3 of the Warehousing Development and Regulatory Authority (Warehouse Accreditation) Regulation, 2011}

1. List of Produce / Goods to be Stored-
 - a.
 - b.
 - c.
 - d.
 - e.
2. Quality Grading System-
3. System of Price Assessment for Produce offered for Storages-
4. Critical Storage Conditions offered by Warehouse Keeper-
 - a. **Pl put tick mark against the Type of Cold Storage applicable and indicate critical storage conditions offered for each type of goods to be stored** (Pl. attach additional sheet if no. of goods are large)-
 - i. Storage for Horticulture Produce not requiring Pre-Cooling-
 - A. if conforms to NHB CS Type-1- Y / N
 - B. Pull Down - Pull-down rate....., RH-.....%, CO₂ level-.....
 - C. Holding – Temperature Humidity..... CO₂ level.....
 - ii. Storage for Horticulture Produce requiring Pre-Cooling-
 - ~~A.~~ If conforms to NHB CS Type-2- Y or N
 - ~~B.~~ Pre-cooling:- hydro-coolers / forced air pre-cooling/ vacuum pre-cooling - batch size and rate of pre-cooling-
 - ~~C.~~ Pull down- (1) Pull-down rate-....., (2) RH-.....%, (3) CO₂ level-
 - ~~D.~~ Holding- Temperature Humidity..... CO₂ level.....
 - iii. CA Storage-
 - ~~A.~~ If conforms to NHB CS Type-3-
 - ~~B.~~ Pre-cooling:- hydro-coolers / forced air pre-cooling/ vacuum pre-cooling batch size and rate of pre-cooling **or,**
 - ~~C.~~ Pull down- (1) Pull-down rate-....., (2) RH-.....%, (3) CO₂ level-
 - ~~D.~~ Holding- Temperature RH (%)......, N₂ level....., O₂ level....., CO₂ level.....
 - b. **Frozen Storage-**
 - i. Chilling or IQF with frozen storage (Chilling / IQF rate and holding temperature range)-
 - ii. Blast freezing (Cooling rate and holding temperature range)-
5. **Enclosures-**
 - a. Attested Copy of Insurance Policy against Fire/ Floods/ Theft / Burglary/ Riot etc-
 - b. Details of Insurance Cover made available for Goods Stored
 - c. Attested Copy of System Performance Data sheet generated by data logger for Past 1 year
 - d. Attested Copy of Surveillance Report, if any (for renewal of certificate of accreditation)

Date-

Signature of Applicant

Place-.....

Section- 4

Managerial Competence

{ref. S. 4 of warehousing (Development and Regulation) Act, 2007 and clause 3 of The Warehousing Development and Regulatory Authority (Warehouse Accreditation) Regulation, 2011}

1. Particulars of Managerial Man-power and Job Chart

S. No.	Designation Assigned*	Function/ Job Chart*	Minimum Educational Qualification	Training Details	Details of Job Experience	Remarks
1	Project Engineer					
2	Manager					
3	Supervisor					
4	Accountant					
5	Record Keeper					
6	Computer Operator					

*These are by way of example and one or more function may be clubbed keeping in view work load

2. Particulars of Operating Personnel-their Job Chart

S. No.	Designation Assigned*	Function/ Job Chart*	Minimum Educational Qualification	Training Details	Details of Job Experience	Remarks
1	Operator					
2	Mechanic					
3	Electrician					
4	Plumber					
5	Grader					
6	Weigher					
7	Sampler					
8	Security Officer					

*These are by way of example and one or more function may be clubbed keeping in view work load

3. Put tick mark against following Manuals if maintained at Cold Storage Warehouse-

- a. Operating Manual for Warehouse Receipt System--
- b. Operation Manual for Plant & Machineries including Annual Maintenance--
- c. Safety Manual Against Hazards of Fire/ Refrigerant Leakage --
- d. Operation Manual for Hazards Covered by Insurance Policies

Date-.....

Signature of Applicant

Place-.....

Section- 5

Storage Worthiness of Warehouse

{ref. S. 4 of warehousing (Development and Regulation) Act, 2007 and clause 3 of The Warehousing Development and Regulatory Authority (Warehouse Accreditation) Regulation, 2011}

Note- For cold storages set up in accordance with technical standards prescribed by DAC in this regard in which case implementation protocol has been followed under Government schemes of NHM / HMNEHA/ NHB / APEDA / MoFPI etc., applicant may submit a copy of basic data sheet in prescribed format, duly approved by such scheme implementing agency at the time of issue of letter of intent/ in principle approval to the project proposal and also a copy of Joint Inspection Report prepared before release of subsidy under the scheme as evidence for storage worthiness of cold storage. Applications for cold storages not covered by this provision must submit basic data sheet in following format for latest position prior to date of application.

Model Basic Data Sheet

(Ref. Section 2 of relevant Technical Standards of NHB as is applicable)

A. Identification

Name of Cold Storage			
Location of Cold Storage	Area / Village		Town
	District		State
Name of Promoter Company / Owner			
Type of company (Proprietorship / Partnership / Pvt. Ltd / Ltd)			
Postal address of Promoter			
	Tel / Fax	Mob. No	E-mail
Present activity in brief			
Name of CEO / MD			
Name of Manager / Contact Person			Phone / Mobile No

B. Basic Cold Store Design Considerations

i) Commodity Storage Requirements

Type of Commodities/Produce		
Ideal / Recommended Storage Conditions – Temperature (DB in °C) – Humidity RH (%) Range – Air Circulation (CMH/MT of Produce) – Ventilation (Air Changes/Day) – CO ₂ Range (PPM) – Produce Cooling Rate (°C/day) – Freezing Point °C – Others		
Cold Chamber Dry bulb (DB in °C)		
Cold Chamber RH (%)		
Max Storage period (months)		
Max product temp (°C) – at the time of loading		
Daily loading rate (MT/day) – in each cold chamber		
Loading Period (months)		
Pull down rate (°C / day)		
Unloading Period (months)		

Daily unloading rate (MT/day) – from each cold chamber		
Ante Room Conditions (T °C & RH %)		
Sorting & Grading Area (T °C & RH %)		
Special Provisions – CIPC treatment for Process Potatoes		
Special Provisions – MA / Ethylene Control / Fumigation/ Fresh Air etc		

ii) Fresh Air / Ventilation System

Brief Description of CO ₂ Extraction / Ventilation System	
CO ₂ Concentration Control Range (PPM)	
Monitoring & Control Instrument – Type – Accuracy	
Ventilation Capacity (Max Air Changes/Day)	
Design Considerations for Energy Recovery and Preventing Wetting of Produce	

iii) Cold Store Chamber Sizing and Capacity

- No. of chambers:
- Type : Mezzanine/ Palletized
- Max Height of Building

Details	CS Chamber 1	CS Chamber- 2	CS Chamber- 3	CS Chamber- 4
Total Capacity of Each Cold Store Chamber (MT)				
Internal Chamber Dimensions L x B x H (m)				
No. of mezzanine floors X Height (m) per floor				
Size & Weight of Bags or Boxes being stored				
Total number of Bags/Boxes / crates stored in each Cold Store Chamber				

iv) Ante Room & Process Areas

Details	Length (m)	Width (m)	Height (m)
Ante Room			
Sorting & Grading Area			
Loading / Unloading dock			

v) Machine Room & Utility Areas

Details	Length (m)	Width (m)	Height (m)
Machine Room			
Office Area			

Toilets & Changing rooms			
Any other			

vi) Building & Construction Details

- **Type of construction** : Civil/ Pre-engineered Building

Type of External walls of cold chambers	
Type of Internal / Partition walls	
Type of Roof / Ceiling	
Type of Internal structure / Racks	
Type of mezzanine grating	
Types of Lighting fixtures in cold Chambers	
Types of Lighting fixtures in Process & Other Areas	

vii) Insulation and Vapor Barrier

- **Type of Insulation** : Insulating Sheets / Metal Skin Composite panels

Type of Insulation	Wall		Ceiling / Roof	Floor
	External	Internal		
Type of material EPS / Metal Skin PUF Composite Panels / XPS/ PUR, Others				
Relevant IS Code				
Density (kg/m ³)				
Thermal Conductivity at +10°C k value (W/m.K)				
Thermal diffusivity m ² /h				
Water vapour transmission rate, ng/Pa.sm, Max.				
Water absorption after 24h immersion, percentage by mass.				
Relevant IS Code of Practice for Thermal Insulation of Cold Store				
Total Insulation Thickness (mm)				
No. of layers & Thickness / layer (mm)				
Type of vapor barrier & thickness (microns)				
Type of Bituminous/Sticking Compound				
Type of Cladding / Covering/External Finish				
Locking/Fixing & Sealing System in case of Metal Skin Composite Panels				
Any other info				

viii) Cold Store Doors & Air Curtains

Type of Insulation	Details
No. of Insulated doors	
Type hinged / sliding	
Insulation Material EPS / PUF / Others	
Thickness of Insulation (mm)	
Type of cladding	
Size of door opening	
Provision of Strip curtains – nos. & overlap %	
Air curtains, if any	
Others	

ix) Material Handling

- **Proposed Practice :** Manual / Semi Automated /Automated

Procedure	Brief Description
Material Handling Procedures & Equipments	
Cap of Electric Elevator Rating of motor (kW)	
Any other device	

x) Grading, Sorting Washing & Packing Line (optional)

- **Proposed Practice :** Manual / Semi Automated /Automated

Procedure	Brief Description
Process Line	
Total Connected Load (kW)	

Please attach a Plan & Layout of the proposed Cold Store unit in accordance to the Statutory Building By-Laws and BIS Building Codes & Standards duly approved by a Registered Architect and Structural Engineer. The drawings should detail out insulation type, thickness, and fixing methodology in sectional details.

C. Heat Load Calculation of Cooling System – Summary

Ambient Conditions	Summer	Monsoon	Winter
Dry Bulb Temperature (°C)			
Wet Bulb Temperature (°C)			

Refrigeration Load	During Loading (kW)	During Pull Down (kW)	During Holding (kW)
Transmission Load			
Product Load			
Internal Load	Lighting load		
	Occupancy load		
Infiltration Load			
Ventilation/ Fresh Air Load			
Equipment Load - Fan motors etc.			
Total Load (kW/24 hrs)			

Compressor Operation Hours/Day	Loading Period		
	Pull Down Period		
	Holding period		
Multipliers	Safety Factor		
	Defrost Period		
Total Refrigeration Load	Peak Period	Holding Period	Lean Period
Total Load (KW)			

Please attach detailed heat load calculation sheets of the proposed cold store unit in accordance to the prescribed Technical Standards and Guidelines duly approved by a Qualified Engineer.

D. Cooling System Design & Equipment Selection

i) Cooling System Configuration

Type of Refrigerant	Ammonia / Freon / Others
Type of System	Direct Exp / Gravity Feed / Overfeed
Type of compressor	Reciprocating / Screw / Scroll / Others
Type of capacity control	Automatic In steps / Step less
Type of condenser	Atmospheric / Evaporative / Shell & Tube / Plate Heat Exchanger / Other
Cooling Towers (if applicable)	FRP Induced Draft / Others
Type of cooling coil	Ceiling suspended / Floor Mounted / Others
Type of defrosting	Air / Water / Electric / Hot gas
Humidification System & Control (Brief Description)	

ii) Compressor Detail

Compressor Make & Model	Nos.	Comp. RPM	Operating Parameters Evap. SST. / Cond. Temp (°C)	Refrigeration Capacity (KW)	Motor Rating. (KW)	Total Electric Power. (BkW)	Remarks Working /Standby

iii) Condenser Details

Condenser Make & Model	Nos.	Operating Parameters Cond.Temp.(SDT)/ in/out water temp(°C) & flow (lps)	Condenser Capacity (kW)	Electric Fan /Pump Motor Rating (kW)	Total Electric Power (BkW)	Remarks Working /Standby

iv) Cooling Tower Details (if applicable)

Cooling Tower Make & Model	Nos.	Operating Parameters DB & WB Temp, in/out water temp(°C)	Cooling Tower Capacity(KW)	Fan & Pump Capacity (CMH/LPS) & Motor (kW)	Total Electric Power (BkW)	Remarks Working /Standby

v) Air Cooling Units (ACU)

ACU Make & Model	Nos.	Operating Parameters Evap. (SST) & TD* (°C)	Cooling Capacity (kW)	Air Flow (CMH) & Face Velocity (M/S)	Material of Coil Tubes & Fins	Fin pitch (mm)	Total Fan Electric Power (BKW)

(*) TD – Temperature difference between Evap. (SST) °C & Return Air (at coil inlet).

Please attach Detailed Technical Data Sheets of each equipment namely Compressors, Condensers, Cooling Towers, Air Cooling Units giving General Layout, Dimensions, Material of Construction, Rated Capacity, Operating Parameters and COP (please note that the Air Cooling Unit data sheet should include heat transfer area, fin spacing, no. of rows, air flow, face velocity, fan static, air throw, Fan Motor BKW/KW, fin spacing, etc) duly Certified by the respective equipment manufacturers with reference to the Relevant Codes & Standards.

E. Electrical Instillation

Total Connected load (kW)	
Estimated power requirement at Peak Load Period (BkW)	
Estimated power requirement at Holding Load Period (BkW)	
Estimated power requirement at Lean Load Period (BkW)	
Capacity of Transformer (KVA) (proposed)	
Size of Capacitor for power factor correction & their operation	
Make & Capacity of standby D.G. Set (KVA)	

F. Safety Provisions

Details of Fire Fighting equipment	Dry	
	Water based	
Handling Refrigerants & Leaks	Leak Detection	
	Handling measures	
Safety devices – LP/HP cut-outs, safety valves, shut off valves etc.		
Details of Emergency alarm system & push button system in cold chambers		

Emergency lighting in Cold chambers & other areas	
Lightening arrestors	
Any other safety provisions	

G. Codes & Standards Followed

Building Design & Structure	
Construction Materials	
Thermal Insulation & Application	
Refrigeration Equipment & Systems	
Electrical & Mechanical Systems	
Food Safety	
Others	

H. Energy Saving Equipment & Measures

Details of Energy Saving devices	Brief Description and Savings
Light Fixtures CFL/LED	
Natural Lighting for general areas	
VFD for fans / compressors	
Refrigerant Controls and Automation	
Air Purger	
Power Factor Controller	
Energy recovery heat-exchanger for Ventilation System	
Renewable/ Solar Energy e.g. PV lighting	
PLC Control, & Data Acquisition	
Any other features e.g. water recycling, rain water harvesting ...	

I. Operation & Maintenance

Description	Nos. / Details
Proposed staff for Operation & Maintenance	
Proposed Annual Maintenance Contracts (if any)	
Training & Preventive Maintenance procedures	
Sanitation & Hygiene practice	
Pollution Control	

J. Estimated Performance Parameters of Proposed Cold Store

Parameters	Peak Period	Holding Period	Lean Period
Coefficient Of Performance (COP) Of the Cold Store Unit			
Power Consumption (KWH/Day)			
Total Electricity Cost (Rs/Day)			
Electricity Cost towards Storage (Rs/ MT /Day)			

K. Other Information

Enclosures-

- i. Applicant must submit for record “as built drawings”, including cold store layout, P&I and electrical drawing and an operation & maintenance manual along with a list of essential spare parts supplied to him by the refrigeration contracting agency.
- ii. He should also submit a copy of the certificate of satisfactory commissioning of the cooling system in conformance to the performance indicators as per prescribed standards as issued by the refrigeration contracting agency to him.

Place

Date

Signature and
Name of Warehouseman with seal

Place

Date

Signature and
Name of Project Engineer with seal