









# 1. Safety Precautions

- Read the following “SAFETY PRECAUTIONS” carefully before installation.
- Electrical work must be installed by a licensed electrician. Be sure to use the correct rating of the power plug and main circuit for the model to be installed.
- The caution items stated here must be followed because these important contents are related to safety. The meaning of each indication used is as below. Incorrect installation due to ignoring of the instruction will cause harm or damage, and the seriousness is classified by the following indications.



 <b>WARNING</b>	This indication shows the possibility of causing death or serious injury.
 <b>CAUTION</b>	This indication shows the possibility of causing injury or damage to properties only.

	Symbol with white background denotes item that is PROHIBITED.
	Symbol with dark background denotes item that must be carried out.




- Carry out test running to confirm that no abnormality occurs after the installation. Then, explain to user the operation, care and maintenance as stated in instructions. Please remind the customer to keep the operating instructions for future reference.

 <b>WARNING</b>	
	<ul style="list-style-type: none"> <li>• Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Any unfit method or using incompatible material may cause product damage, burst and serious injury.</li> <li>• Do not install outdoor unit near handrail of veranda. When installing air-conditioner unit on veranda of a high rise building, child may climb up to outdoor unit and cross over the handrail causing an accident.</li> <li>• Do not use unspecified cord, modified cord, joint cord or extension cord for power supply cord. Do not share the single outlet with other electrical appliances. Poor contact, poor insulation or over current will cause electrical shock or fire.</li> <li>• Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen.</li> <li>• Do not insert your fingers or other objects into the unit, high speed rotating fan may cause injury.</li> <li>• Do not sit or step on the unit, you may fall down accidentally.</li> <li>• Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.</li> <li>• When installing or relocating air conditioner, do not let any substance other than the specified refrigerant, eg. air etc mix into refrigeration cycle (piping). Mixing of air etc. will cause abnormal high pressure in refrigeration cycle and result in explosion, injury etc.</li> <li>• Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flame, sparks, or other sources of ignition. Else, it may explode and cause injury or death.</li> <li>• Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc.</li> </ul> 
	<ul style="list-style-type: none"> <li>• For R32/R410A model, use piping, flare nut and tools which is specified for R32/R410A refrigerant. Using of existing (R22) piping, flare nut and tools may cause abnormally high pressure in the refrigerant cycle (piping), and possibly result in explosion and injury. For R32 and R410A, the same flare nut on the outdoor unit side and pipe can be used.</li> <li>• Since the working pressure for R32/R410A is higher than that of refrigerant R22 model, replacing conventional piping and flare nuts on the outdoor unit side are recommended.</li> <li>• If reuse piping is unavoidable, refer to instruction “IN CASE OF REUSING EXISTING REFRIGERANT PIPING”</li> <li>• Thickness of copper pipes used with R32/R410A must be more than 0.8 mm. Never use copper pipes thinner than 0.8 mm.</li> <li>• It is desirable that the amount of residual oil less than 40 mg/10 m.</li> <li>• Engage authorized dealer or specialist for installation. If installation done by the user is incorrect, it will cause water leakage, electrical shock or fire.</li> <li>• For refrigeration system work, install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock or fire.</li> <li>• Use the attached accessories parts and specified parts for installation. Otherwise, it will cause the set to fall, water leakage, fire or electrical shock.</li> <li>• Install at a strong and firm location which is able to withstand weight of the set. If the strength is not enough or installation is not properly done, the set will drop and cause injury.</li> <li>• For electrical work, follow the national regulation, legislation and this installation instructions. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in the electrical work, it will cause electrical shock or fire.</li> <li>• Do not use joint cable for indoor / outdoor connection cable. Use the specified indoor/outdoor connection cable, refer to instruction <b>CONNECT THE CABLE TO THE INDOOR UNIT</b> and connect tightly for indoor/outdoor connection. Clamp the cable so that no external force will have impact on the terminal. If connection or fixing is not perfect, it will cause heat up or fire at the connection.</li> <li>• Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause fire or electrical shock.</li> <li>• This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD), with sensitivity of 30 mA at 0.1 sec or less. Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.</li> </ul>

 **WARNING**

	<ul style="list-style-type: none"><li>• During installation, install the refrigerant piping properly before running the compressor. Operation of compressor without fixing refrigeration piping and valves at opened position will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.</li><li>• During pump down operation, stop the compressor before removing the refrigeration piping. Removal of refrigeration piping while compressor is operating and valves are opened will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.</li><li>• Tighten the flare nut with torque wrench according to specified method. If the flare nut is over-tightened, after a long period, the flare may break and cause refrigerant gas leakage.</li><li>• After completion of installation, confirm there is no leakage of refrigerant gas. It may generate toxic gas when the refrigerant contacts with fire.</li><li>• Ventilate if there is refrigerant gas leakage during operation. It may cause toxic gas when the refrigerant contacts with fire.</li><li>• Be aware that refrigerants may not contain an odour.</li></ul>
	<ul style="list-style-type: none"><li>• This equipment must be properly earthed. Earth line must not be connected to gas pipe, water pipe, earth of lightning rod and telephone. Otherwise, it may cause electrical shock in case of equipment breakdown or insulation breakdown.</li></ul>

 **CAUTION**

	<ul style="list-style-type: none"><li>• Do not install the unit in a place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire.</li><li>• Prevent liquid or vapor from entering sumps or sewers since vapor is heavier than air and may form suffocating atmospheres.</li><li>• Do not release refrigerant during piping work for installation, re-installation and during repairing refrigeration parts. Take care of the liquid refrigerant, it may cause frostbite.</li><li>• Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.</li><li>• Do not touch the sharp aluminium fin, sharp parts may cause injury.</li></ul> 
	<ul style="list-style-type: none"><li>• Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.</li><li>• Select an installation location which is easy for maintenance. Incorrect installation, service or repair of this air conditioner may increase the risk of rupture and this may result in loss damage or injury and/or property.</li><li>• Power supply connection to the room air conditioner. Use power supply cord 3 x 1.5 mm<sup>2</sup> (1.0 ~ 1.5HP), 3 x 2.5 mm<sup>2</sup> (2.0 ~ 2.25HP) type designation 60245 IEC 57 or heavier cord. Connect the power supply cord of the air conditioner to the mains using one of the following method. Power supply point should be in easily accessible place for power disconnection in case of emergency.</li><li>• In some countries, permanent connection of this air conditioner to the power supply is prohibited.<ol style="list-style-type: none"><li>1) Power supply connection to the receptacle using power plug. Use an approved 15/16 A (1.0 ~ 1.5HP) or 16 A (2.0 ~ 2.25HP) power plug with earth pin for the connection to the socket.</li><li>2) Power supply connection to a circuit breaker for the permanent connection. Use an approved 16 A (1.0 ~ 2.25HP), circuit breaker for the permanent connection. It must be a double pole switch with a minimum 3.0 mm contact gap.</li></ol></li><li>• Installation work. It may need two people to carry out the installation work.</li><li>• Keep any required ventilation openings clear of obstruction.</li></ul>