

**Required tools for Installation Works**

- 1 Phillips screw driver
2 Level gauge
3 Electric drill, hole core drill (ø2 3/8" (ø70 mm))
4 Hexagonal wrench (1/2" (4 mm))
5 Spanner
6 Pipe cutter
7 Reamer
8 Knife
9 Gas leak detector
10 Measuring tape
11 Thermometer
12 Megameter
13 Multimeter
14 Torque wrench
15 Vacuum pump
16 Gauge manifold

**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.

- WARNING: This indication shows the possibility of causing death or serious injury.
CAUTION: This indication shows the possibility of causing injury or damage to properties only.
Items to be followed are classified by the symbols:
Symbol with white background denotes item that is PROHIBITED.
Symbol with dark background denotes item that must be carried out.

- 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.
Do not use unshielded 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.
Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen.

- For R410A model, use piping, flare nut and tools which is specified for 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.
Thickness or copper pipes used with R410A must be more than 1/32" (0.8 mm). Never use copper pipes thinner than 1/32" (0.8 mm).
It is desirable that the amount of residual oil is less than 0.0008 oz/flt (40 mg/10 m).

- When installing air conditioner, do not let any substance other than the specified refrigerant, eg. air etc. mix into refrigeration cycle (piping). Mixing of air will cause abnormal high pressure in refrigeration cycle and result in explosion, injury etc.
Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc.
Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.
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 will cause abnormal high pressure in refrigeration cycle and result in explosion, injury etc.

- Do not install the unit at place where leakage of flammable gas may occur. In case of gas leaks and accumulates at surrounding of the unit, it may cause fire.
Do not release refrigerant during piping work for installation, re-installation and during repairing a refrigeration parts. Take care of the liquid refrigerant, it may cause frostbite.
Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.
Do not touch the sharp aluminium fin, sharp parts may cause injury.

**IMPORTANTS (only for E18RKUA)**

- This product has been designed and manufactured to meet ENERGY STAR™ criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow the manufacturer's refrigerant charging and air flow instructions. Failure to confirm proper charge and airflow may reduce energy efficiency and shorten equipment life.

Attached accessories table with columns for No., Accessories part, Qty., and details for Indoor/Outdoor Unit installation Diagram.

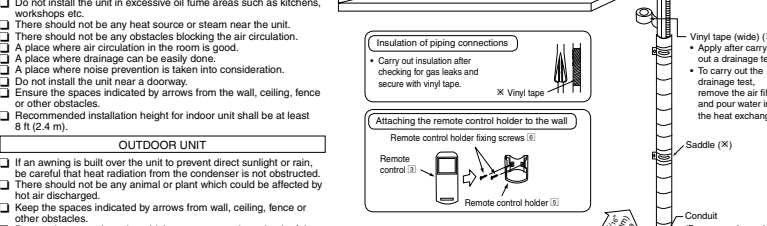


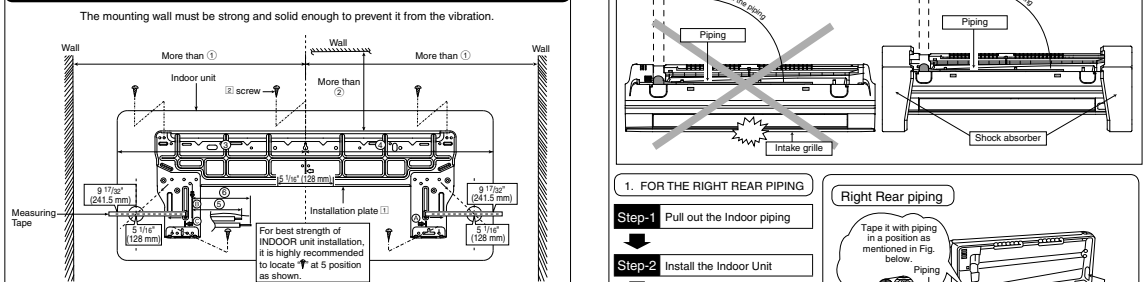
Table with columns for Model, Capacity, Piping size, and other specifications for different Panasonic models.

Example: For E18RKUA If the unit is installed at 41 ft (12.5 m) distance, the quantity of additional refrigerant should be 2.46 oz (62.5 g) ...

**INDOOR UNIT**

**1 SELECT THE BEST LOCATION**  
(Refer to "Select the best location" section)

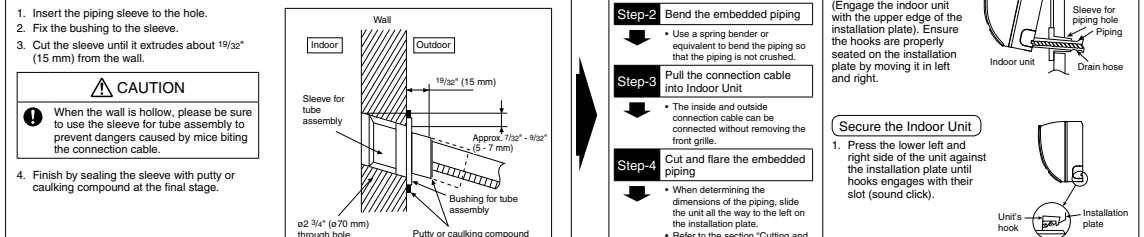
**2 HOW TO FIX INSTALLATION PLATE**



Dimension table for the indoor unit installation plate, listing models and dimensions for four different configurations.

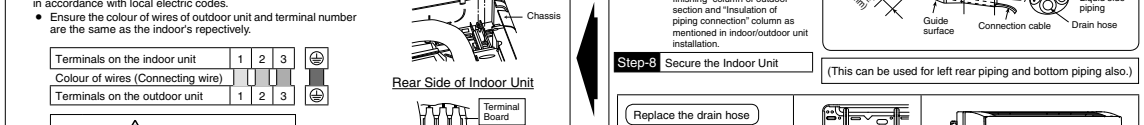
- 1. Mount the installation plate on the wall with 5 screws or more (at least 5 screws).
2. Drill the piping plate hole with ø2 3/4" (ø70 mm) hole-core drill.
3. Line according to the left and right side of the installation plate.

**3 TO DRILL A HOLE IN THE WALL AND INSTALL A SLEEVE OF PIPING**



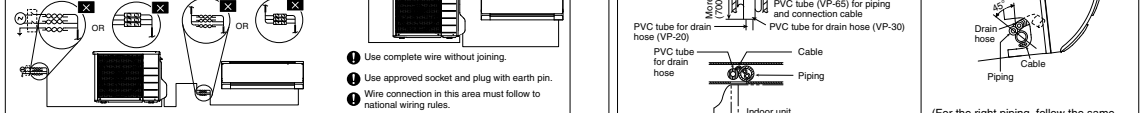
- 1. Insert the piping sleeve to the hole.
2. Fix the bushing to the sleeve.
3. Cut the sleeve until it extrudes about 19/32" (15 mm) from the wall.

**4 INDOOR UNIT INSTALLATION**



- 1. Pull out the Indoor piping.
2. Install the Indoor Unit.
3. Secure the Indoor Unit.
4. Insert the connection cable.

- 1. The inside and outside connection cable can be connected without removing the front grille.
2. Unscrew the conduit cover and fix the conduit connector to conduit cover with lock nut, then secure it against chassis.



- 1. How to pull the piping and drain hose out, in case of the embedded piping.
2. In case of left piping how to insert the connection cable and drain hose.

**5 CONNECT THE CABLE TO THE INDOOR UNIT**

- 1. Please cut using pipe cutter and then remove the burrs.
2. Remove the burrs by using reamer. If burrs is not removed, gas leakage may be caused.
3. Please make flare after inserting the flare nut onto the copper pipes.

**OUTDOOR UNIT**

**1 SELECT THE BEST LOCATION**  
(Refer to "Select the best location" section)

**2 INSTALL THE OUTDOOR UNIT**

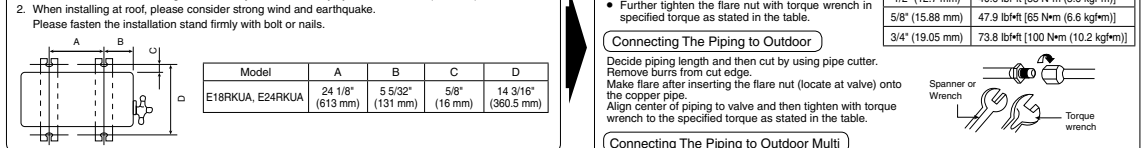
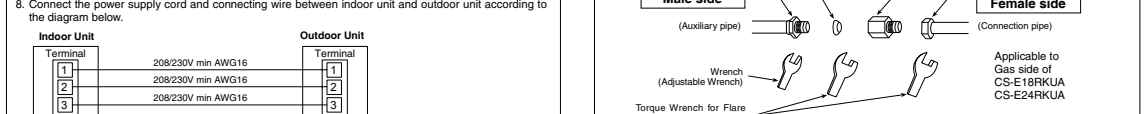


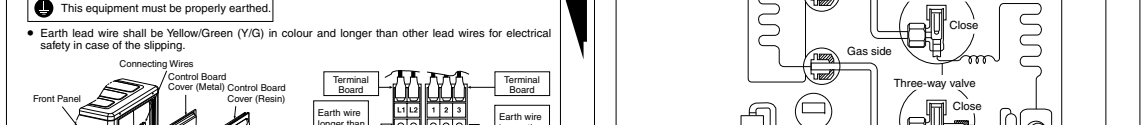
Table showing models (E18RKUA, E24RKUA) and their corresponding dimensions for different configurations.

- 1. Remove control board cover (Resin and Metal).
2. Remove particular plate.
3. Remove plugs.
4. Fix the conduit connectors to the knock out holes with lock-nuts, then secure them against the side panel.



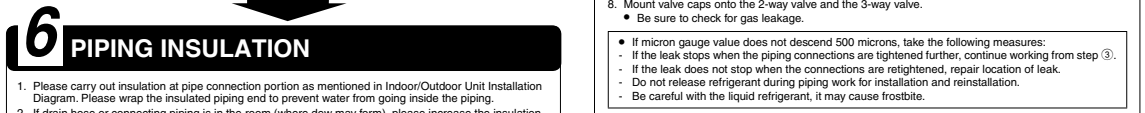
- 9. Secure the wire onto the control board with the holder (clamps).
10. After completing wiring connections, reattach the particular plate and control board cover (metal and resin) to the original position with the screws.

**3 CONNECT THE PIPING TO INDOOR**



- 1. Connect a charging hose with a push pin to the Low side of a charging set and the service port of the 3-way valve.
2. Connect the micron gauge between vacuum pump and service port of outdoor units.

**4 EVACUATION OF THE EQUIPMENT**



- 1. Connect a charging hose with a push pin to the Low side of a charging set and the service port of the 3-way valve.
2. Connect the micron gauge between vacuum pump and service port of outdoor units.
3. Turn on the power switch of the vacuum pump and make sure that connect digital micron gauge and to pull down to a value of 500 microns.

**6 PIPING INSULATION**

- 1. Please carry out insulation at pipe connection portion as mentioned in Indoor/Outdoor Unit Installation Diagram. Please wrap the insulated piping end to prevent water from going inside the piping.
2. If drain hose or connecting piping is in the room (where dew may form), please increase the insulation by using POLY-ETHYLENE FOAM with thickness 1/4" (6 mm) or above.

**INSTALLATION OF AIR PURIFYING FILTER**

- 1. Open the front panel.
2. Remove the air filter.
3. Put the air purifying filter into place as shown in illustration at right.

**DISPOSAL OF OUTDOOR UNIT DRAIN WATER**

- 1. If a drain elbow is used, the unit should be placed on a stand which is taller than 1 1/4" (30 mm).
2. If the unit is used in an area where temperature falls below 32°F (0°C) for 2 or 3 days in succession, it is recommended not to use a drain elbow, for the drain water freezes and the fan will not rotate.



# UNITÉ INTÉRIEURE

## 1 CHOIX DU MEILLEUR EMPLACEMENT (Cf. chapitre « Choix du meilleur emplacement »)

## 2 FIXATION DE LA PLAQUE D'INSTALLATION

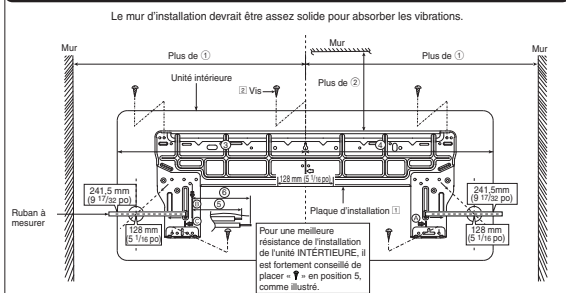
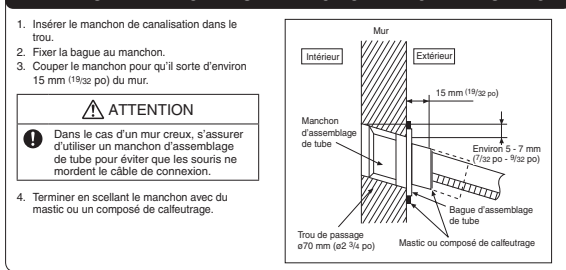


Table with 7 columns (Modèle, 1, 2, 3, 4, 5, 6) and 2 rows of dimensions in mm.

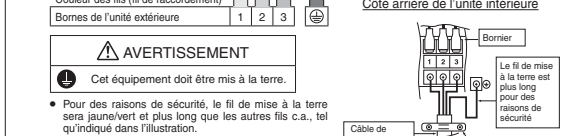
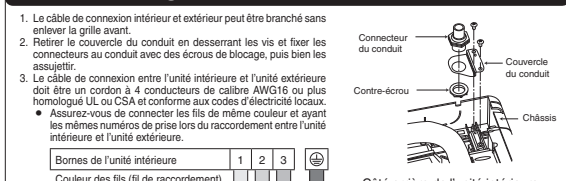
Le mur de la plaque d'installation doit être à plus de (1) à droite ou à gauche du mur. La distance du rebord de la plaque d'installation au plafond doit être de plus de (2). La distance du rebord gauche de la plaque d'installation au côté gauche de l'unité est de (3).

- 1. Poser la plaque d'installation au mur à l'aide de 5 vis ou plus (au moins 5 vis). (Si l'appareil est monté sur un mur de béton, utiliser des boulons d'ancrage)
2. Percer le trou de la canalisation de la plaque à l'aide d'un foret-alésé de 670 mm (ø2 3/4 po).

## 3 PERÇAGE D'UN TROU DANS LE MUR ET INSTALLATION D'UN MANCHON DE CANALISATION

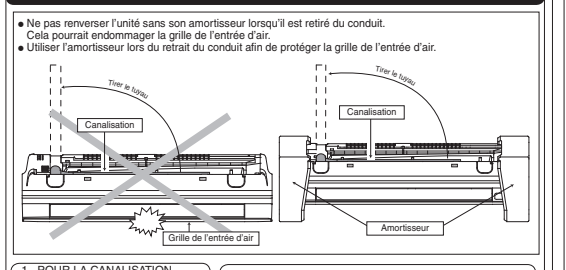


## 5 CONNEXION ÉLECTRIQUE DE L'UNITÉ INTÉRIEURE

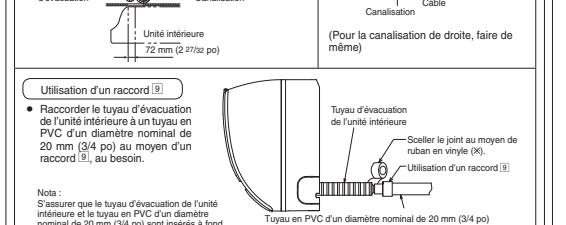
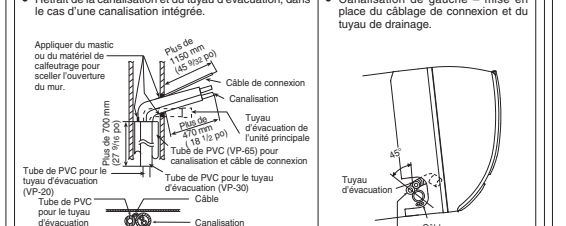
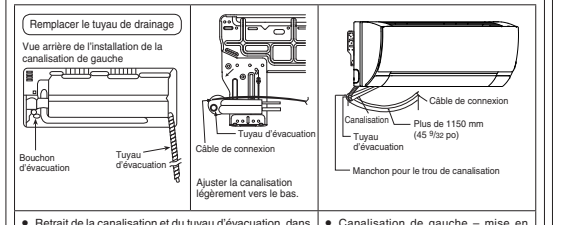
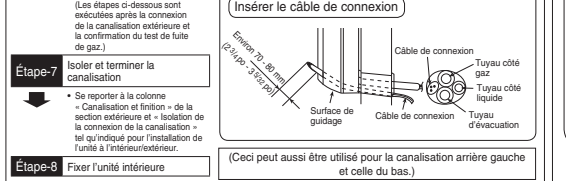
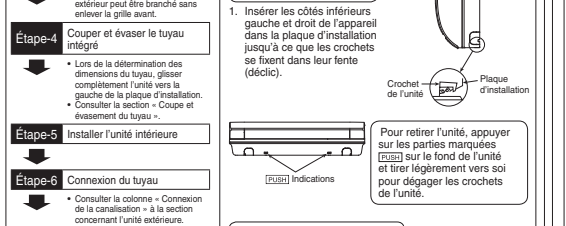
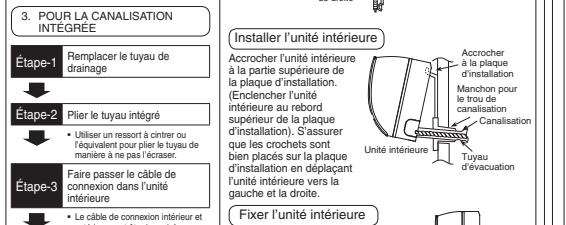
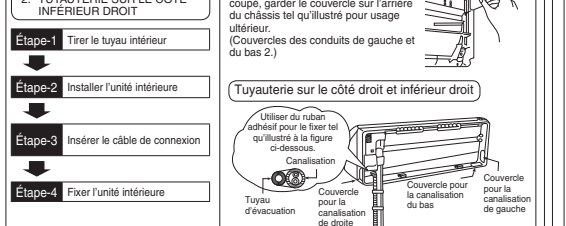


Section for cable management and safety. Includes 'DÉNUDAGE DES FILS CONNEXION', 'RISQUE D'INCENDIE LA JOINTURE DES FILS PEUT PROVOQUER UNE SURCHAUFFURE ET UN INCENDIE', and 'COUPE ET ÉVASEMENT DU TUYAU'.

## 4 INSTALLATION DE L'UNITÉ INTÉRIEURE



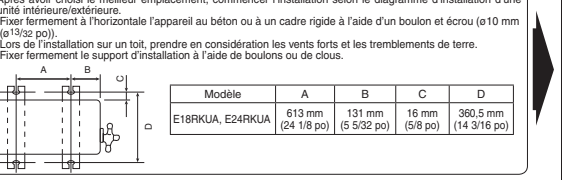
- 1. POUR LA CANALISATION ARRIÈRE DROITE: Étape-1 Tirer le tuyau intérieur; Étape-2 Installer l'unité intérieure; Étape-3 Fixer l'unité intérieure; Étape-4 Insérer le câble de connexion.
2. TUYAUTERIE SUR LE CÔTÉ INFÉRIEUR DROIT: Étape-1 Tirer le tuyau intérieur; Étape-2 Installer l'unité intérieure; Étape-3 Insérer le câble de connexion; Étape-4 Fixer l'unité intérieure.



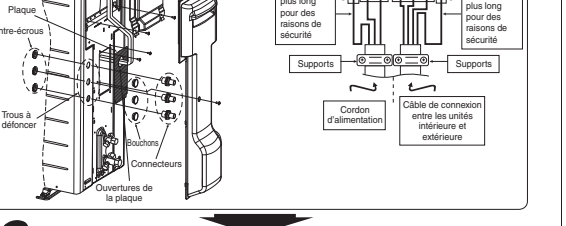
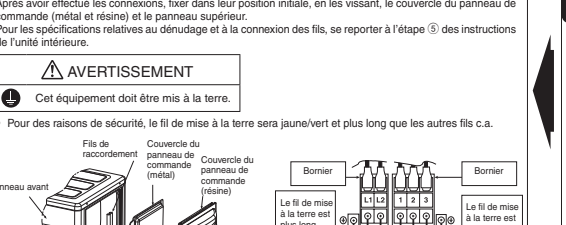
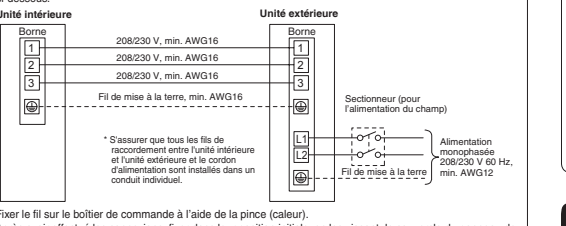
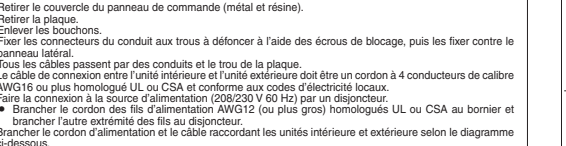
# UNITÉ EXTÉRIEURE

## 1 CHOIX DU MEILLEUR EMPLACEMENT (Cf. chapitre « Choix du meilleur emplacement »)

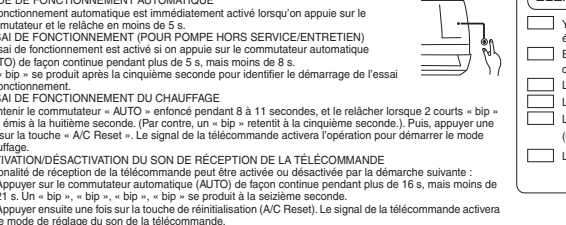
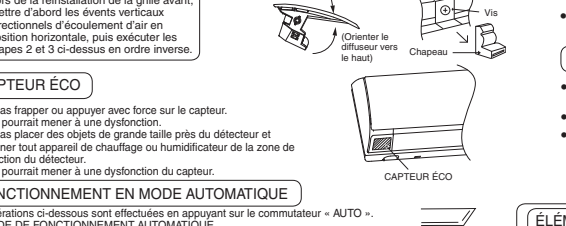
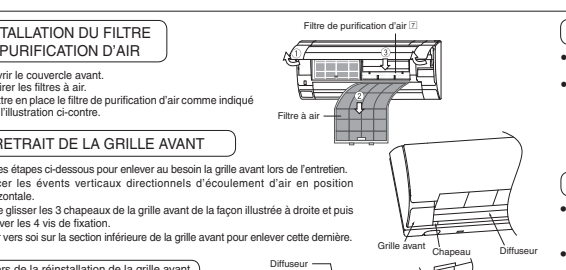
## 2 INSTALLATION DE L'UNITÉ EXTÉRIEURE



- 1. Retirer le couvercle du panneau de commande (métal et résine). 2. Retirer la plaque. 3. Enlever les bouchons. 4. Fixer les connecteurs du conduit aux trous à défoncer à l'aide des écrous de blocage, puis les fixer contre le panneau latéral.

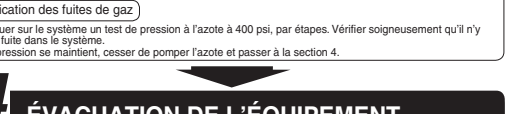
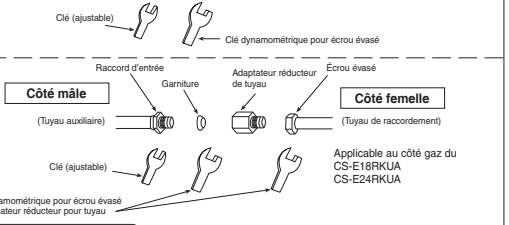
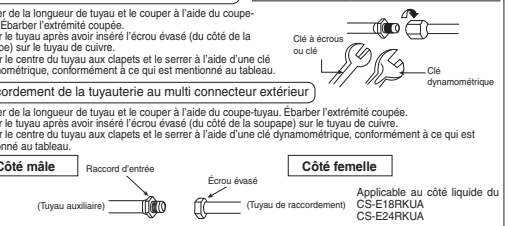


## 6 ISOLANT DE TUYAU



## 3 CONNEXION DE LA CANALISATION

Table showing pipe connection options with dimensions for tube size, coupling, and weight. Includes a note: 'Ne pas trop serrer; cela pourrait provoquer une fuite de frigorigène.' and another note: 'Décider de la longueur de tuyau et le couper à l'aide du coupe-tuyau. Ébarber l'extrémité coupée.'"/>



## 4 ÉVACUATION DE L'ÉQUIPEMENT

