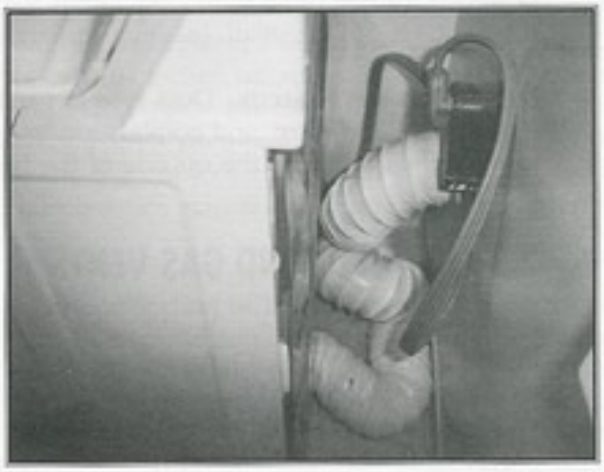
2.4 CONNECTORS / TRANSITION DUCTS

Connectors /Transition Ducts may be rigid or flexible. Rigid transition duct shall be constructed of minimum 0.016-inch-thick (28 gauge) rigid metal duct pipe having smooth interior surfaces with joints running in the direction of airflow. Flexible duct connectors used as transition ducts shall be metallic, not more than 8 feet (6 feet - IRC) in length and an approved type. Connectors/transition ducts **shall not** be concealed within construction.

Never use plastic, non-metal or combustible ductwork - If existing ductwork is plastic, nonmetal, or combustible, it should be replaced with metal. Use only metal exhaust duct that will not support combustion to insure the containment of exhaust air, heat and lint.

PHOTO 2-4



Plastic transition ductwork should be replaced.

Plastic exhaust material can kink, sag, collapse, be easily punctured, reduce airflow, cause lint buildup, extend drying times and adversely effect dryer operation.

PHOTO 2-5

Metal transition duct disconnected at exhaust.

Kinked, collapsed or blocked duct material connected to a gas dryer can allow carbon monoxide and combustion by-products to leak into the home.

WARNING - The dryer MUST ALWAYS be exhausted to the outside to reduce the risk of fire.

Both Type 1 and type 2 clothes dryers shall be exhausted to the outside air. This prevents large amounts of moisture, lint and combustion by-products from being blown into the living space.

Do not exhaust dryer into any wall, ceiling, crawl space or a concealed space of a building.

Dryer exhaust duct joints should be connected and secured with heat resistant metal tape. Never use screws, rivets or any other type of fastener that can protrude into the duct and catch lint thereby reducing the efficiency of the exhaust system.

PHOTO 2-6

Proper duct joints should be connected with heat resistant tape.

Minimum diameter for a dryer exhaust duct is 4 inches unless specified differently in the manufacturer instructions. Even a 1-inch decrease in diameter reduces the duct area for airflow dramatically as in the example below. Because we are dealing with such small diameter ducts this reduction is critical.

Area of duct outlet
= Pi r squared

Pi = 3.14

4 inch duct = 3.14 x 2x2
= 12.56 square inches

3 inch duct = 3.14 x 1.5 x 1.5
= 7.07 square inches

A 1/2 inch buildup of lint in a 4-inch duct would equal a one-inch reduction in overall diameter reducing the area of the duct by 44%.