

## GENERAL

The Micro Engineering Murphy Manufacturing kit represents a typical modern manufacturing facility supplied by rail and truck.

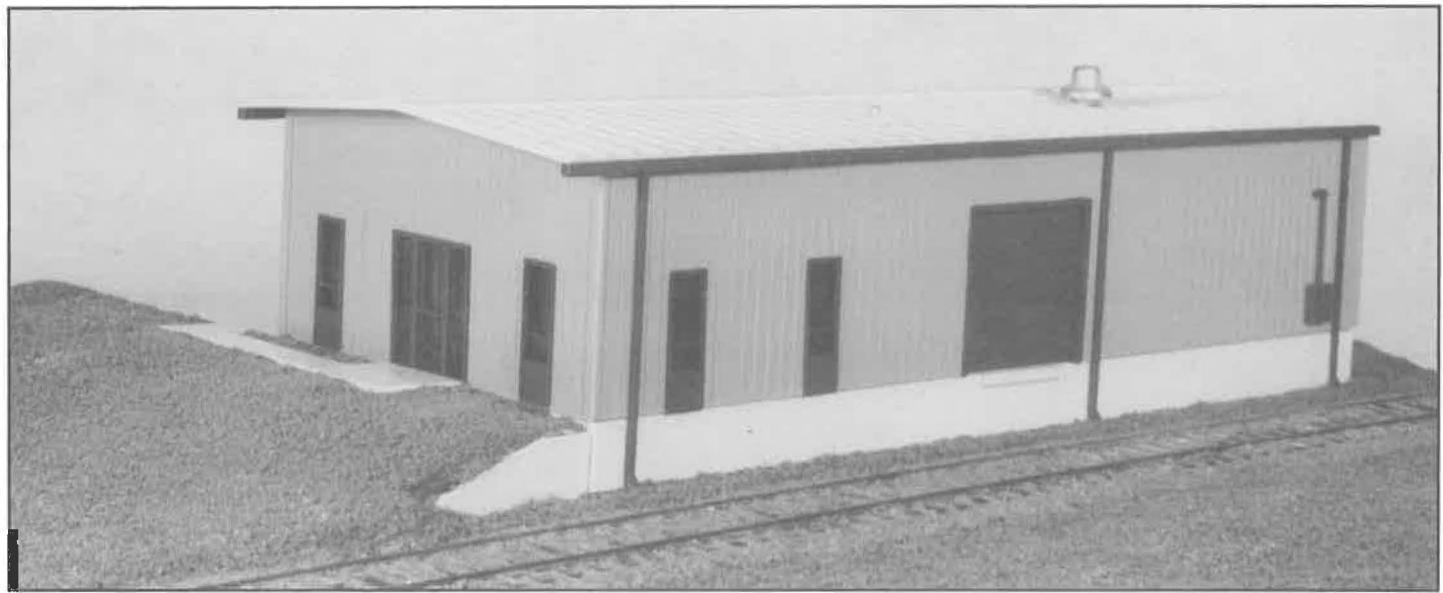
Most parts in this kit are made of injection molded styrene plastic and should be glued with a styrene solvent cement (such as Testers®). Some of the detail parts are made of white metal alloy which should be glued with a cyanoacrylate (CA) cement (such as Super Glue® or Hot Stuff®).

Before beginning assembly clean off and trim any flash or gate marks from all plastic and white metal castings.

Read each instruction sheet step completely before proceeding with that step.

The following parts should be included in your Murphy Manufacturing kit:

2 building sides	2 sidewalks	1 roof fan
2 building ends	2 steps	1 roof vent
2 roof halves	6 warehouse doors	6 downspouts
2 roof braces	4 personnel doors	6 gutter pieces
2 foundation sides	2 office doors	1 electrical box
2 foundation ends	6 office windows	8 loading dock bumpers
2 retaining walls	1 2x4 piece acetate	6 pallets



## ASSEMBLY

1. The modeler has a choice of window and door locations. The openings are located with scored lines cast into the backside of the building walls. Cut the two sides of each opening to be used with a razor knife or motor tool then deeply score the top edge with a razor knife and break the plastic along the score. NOTE: when breaking scored plastic, be sure to bend it toward the inside. File the opening edges so they are smooth and straight.
2. Cement the doors and windows in place. Cut pieces of acetate large enough to overlap the windows and front door and cement in place from the inside using CA cement.
3. Cement the building sides and ends together making sure the four corners of the building are square.
4. The foundation walls are cast with a ledge at the top edge to accept the wall panels. Notch the back of this ledge at each warehouse door location. A notch for the office door has been cast in the foundation end walls. Cement the foundation sides and then the foundation ends to the building walls.
5. To avoid a large crack at the roof peak, file or sand a slight angle on the roof cap edge of each roof half. Check the roof halves for fit and then cement them together and to the walls with the overhang at the front of the building. Equally space and cement the two interior roof braces to the underside of the roof peak.

6. Three pieces of gutter are required to run down the entire roof edge on each side of the building. Trim the gutters to length leaving one end plate on each of the two end gutters while removing both ends from the center gutter. For easier assembly, do not cut the center gutter too short. Cement the gutters to the building sides just under the roof edge.

7. Three downspouts are used on each building side. Trim the downspouts to the proper length based on the landscaping around your building. Cement the downspouts to the building wall locating one near each building corner and one in the building center, or as close to center as doors will permit. (See photo).

8. Cement the electrical box to the side of the building near one corner so the meter is approximately  $\frac{3}{4}$  inch above ground level. Cement the retaining wall(s) to the foundation locating them according to the landscaping around your building. Cement the roof fan and roof vent to the roof. The loading dock bumpers are cemented to the foundation, centered under each overhead door. Loading dock bumpers are often painted orange.

9. The building is now ready to be cemented in place and landscaped. A rail siding can be located on one side of the building with a truck loading area and parking lot on the other side. The area in front of the building is built-up to floor level and can include a stoop, sidewalk, and stairs down to the parking lot cemented alongside the foundation. Make the stoop by cutting a length of sidewalk the width of the front entrance. The second set of stairs can be placed alongside the foundation at a personnel door. Finish detailing the building with loose or stacked pallets and oil stains in the parking lot, bits of trash and weeds around the building, and a track end bumper on the siding.