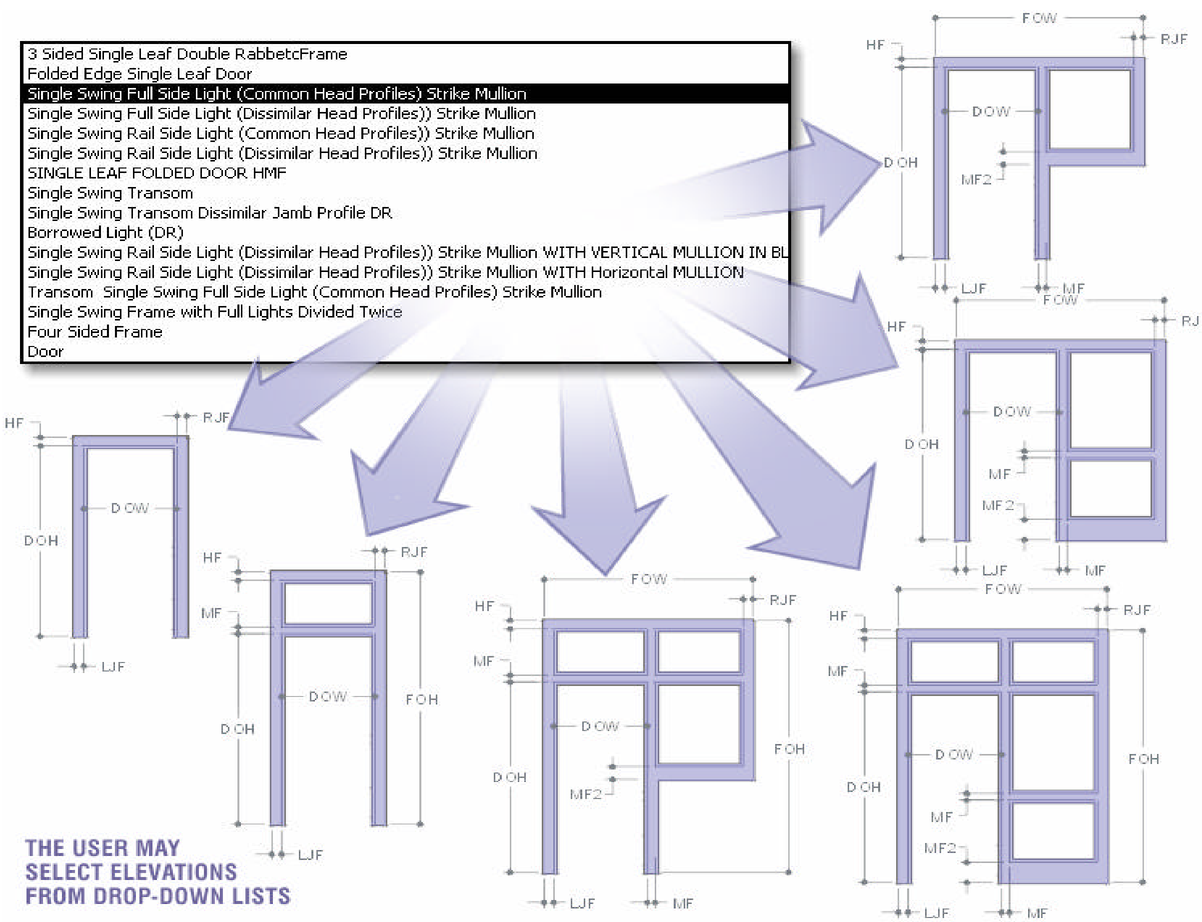
Hollow Metal Elevation Interface

The Hollow Metal GUI (Graphical User Interface) accepts industry-standard entry of Frame & Door information, and automatically generates all associated part drawings, NC programs, List Sheets etc.

Information is entered once for each elevation. The component parts are then automatically engineered, unfolded and programmed for the NC punch press. Components are derived from elevation inputs and require <u>NO</u> user intervention to generate.



The following information is limited to CAD / CAM output module, and briefly covers some of the benefits that the GUI offers for this function.

ELEVATIONS:

Elevations are added to a job by selecting them from a list. The basic system comes with a comprehensive set of elevations. A few of these are shown in the illustration above. Users can easily add new ones as needed.

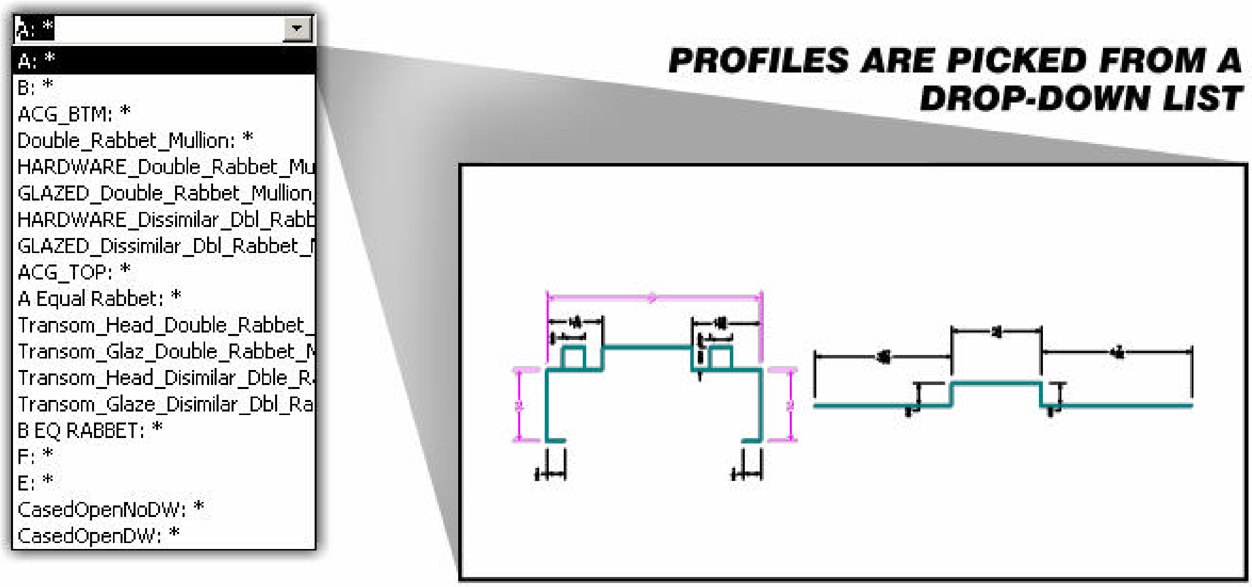
Elevation masters represent general frame configurations or layouts. These are all parametric and may be assigned different profiles and an infinite combination of dimensional values. The elevations of a given job are defined by entering these dimensions.

The individual parts that comprise each elevation are defined by the system and the engineering for each component occurs automatically.

PROFILES:

Each profile type & variation (Double and Single Rabbet, Cased Open, Double Egress, Mullions, Drywall, Masonry, etc.) are included in a drop-down list (see below).

The user selects the Profile and supplies the dimensional information. The described Profile is now stored by the system and is available to be applied to elevations (or parts thereof) within the current job.

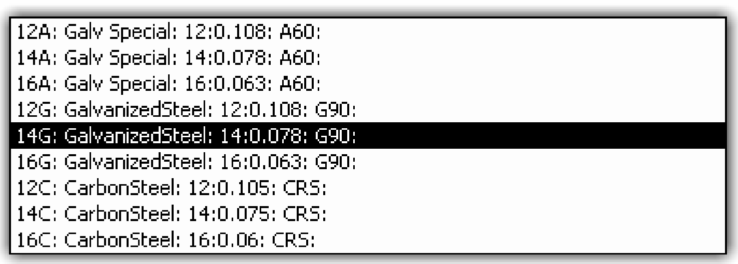


FRAME MATERIAL:

Once your material types and gauges are entered into the system, they may be selected from a drop-down list. This list is available throughout the system, wherever material must be specified.

Material and Gauge information is fed into the system to supply engineering data that affects the dimensions of the flat-pattern, bend allowance, hardware placement, etc.

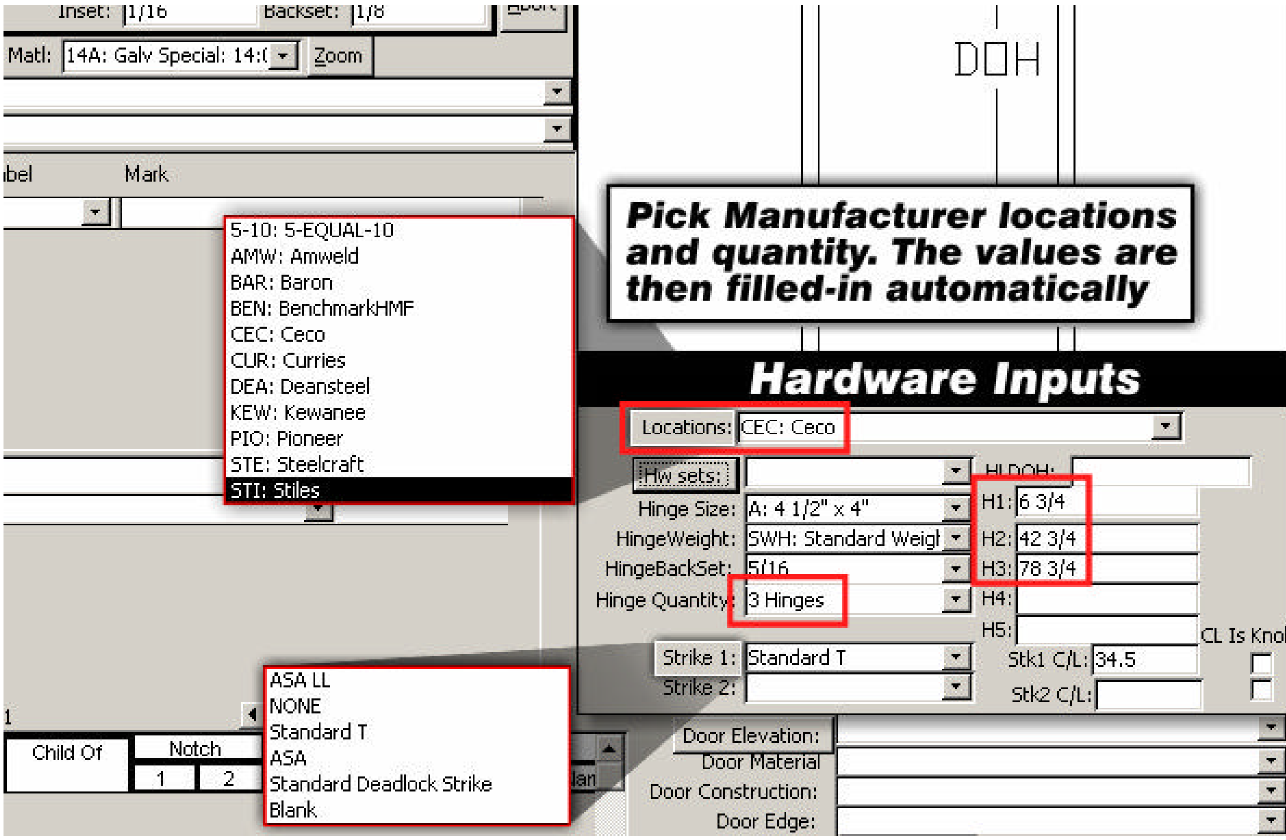
A DROP-DOWN LIST IS USED FOR MATERIAL TYPES AS WELL



HARDWARE SPECIFICATION:

HINGES:

Fields are provided for input of hinge size, weight, backset and quantity (see below). Hinge locations are automatically calculated once the user specifies the quantity and the manufacturer location format. Values supplied by the system may be overridden by the user if deemed appropriate.

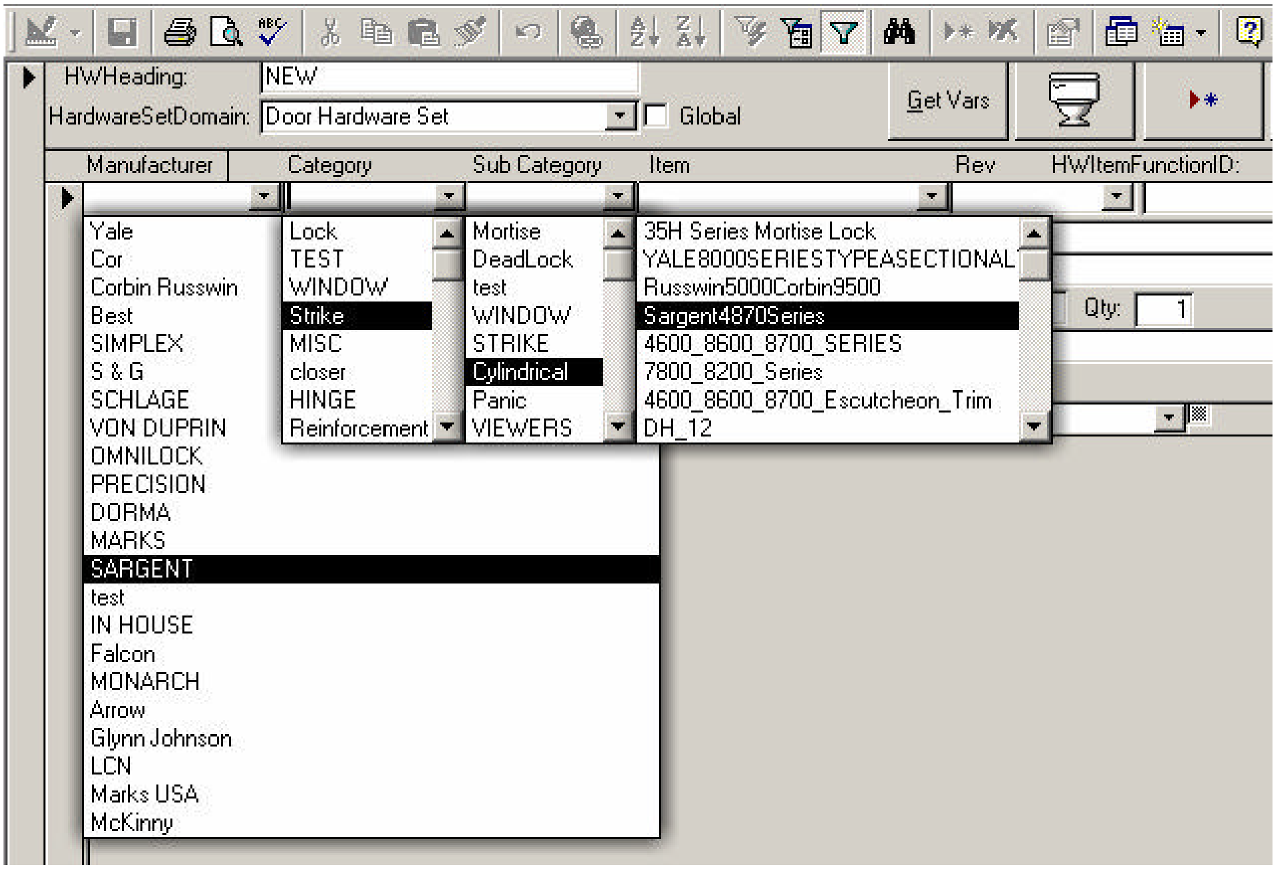


STRIKES:

Input fields for strike types and locations are also presented, as shown above.

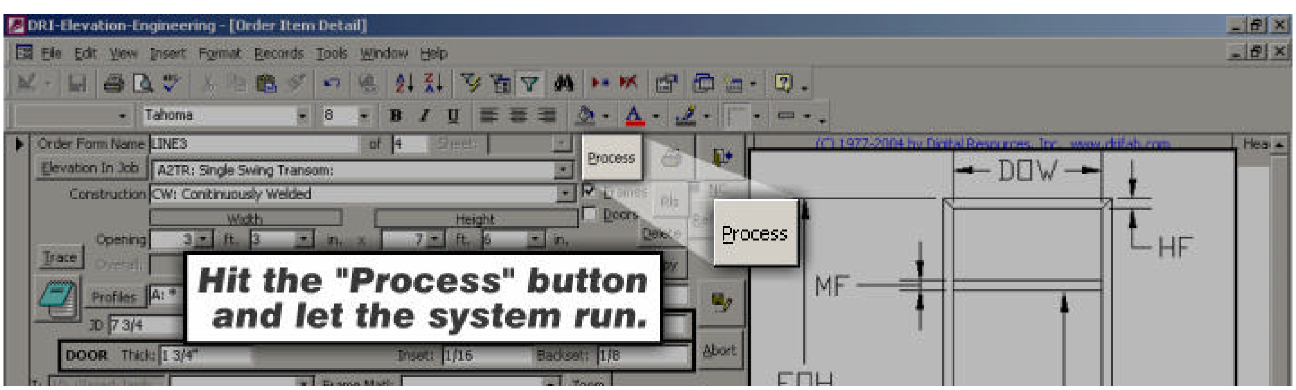
HARDWARE SETS

Hardware Sets are drawn from an extensive library of manufacturers' part numbers. Once these are selected and applied, the system automatically places them in the flat.

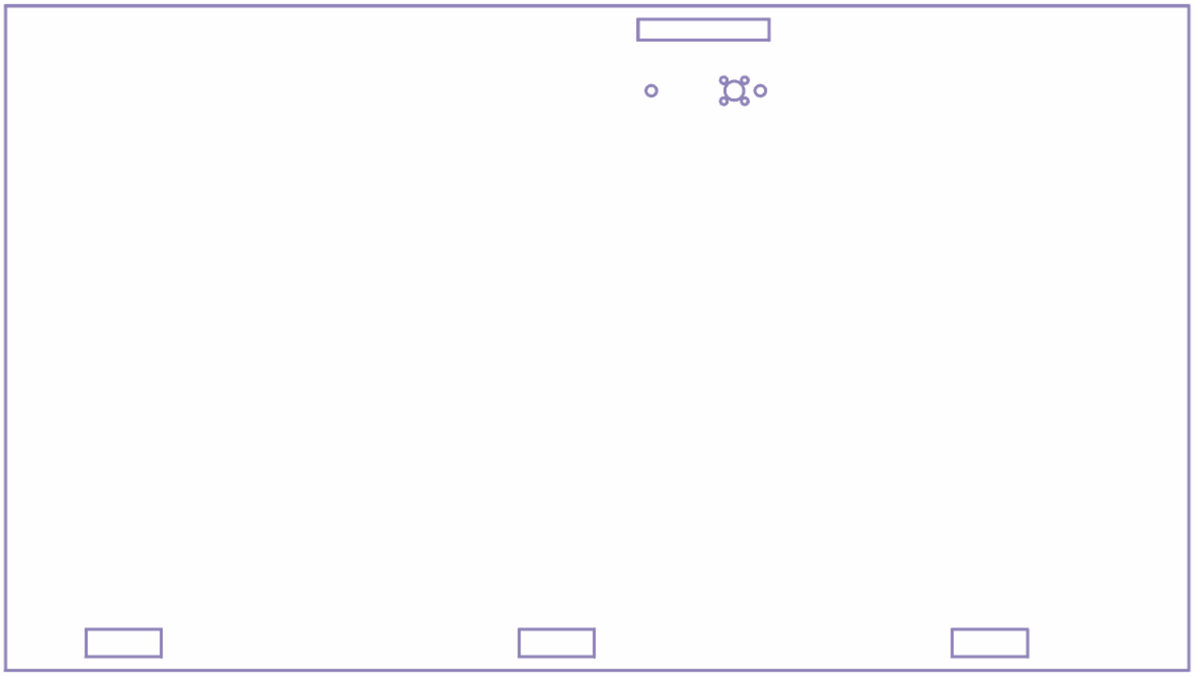


RUNNING THE JOB – THE RESULTS

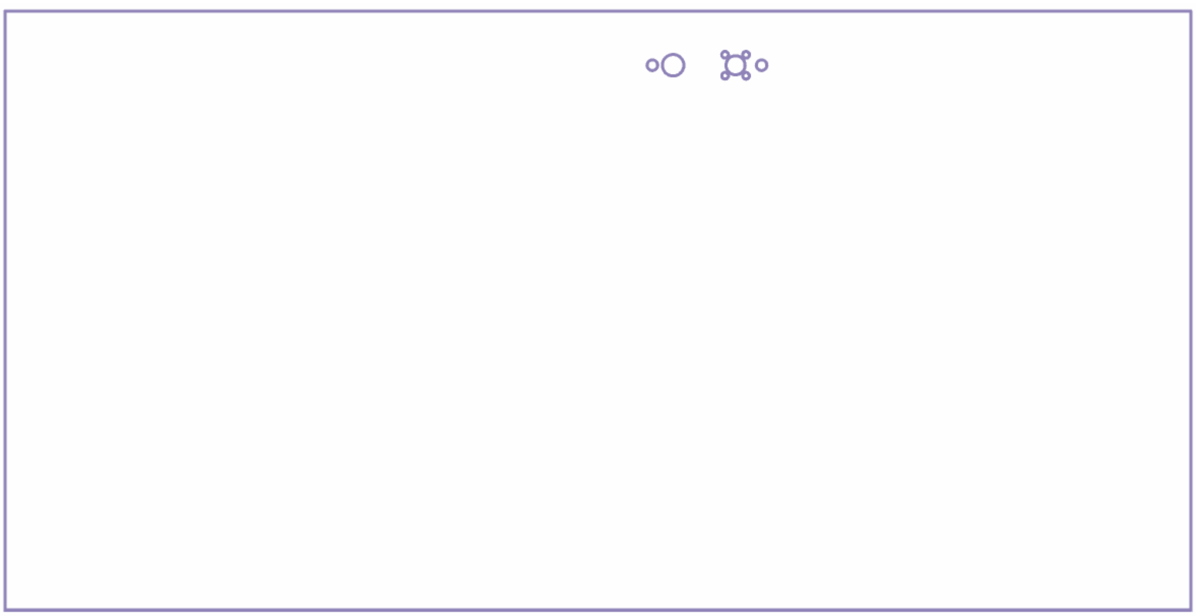
Once the required information is complete for the elevation in question, hit **"Process"**.



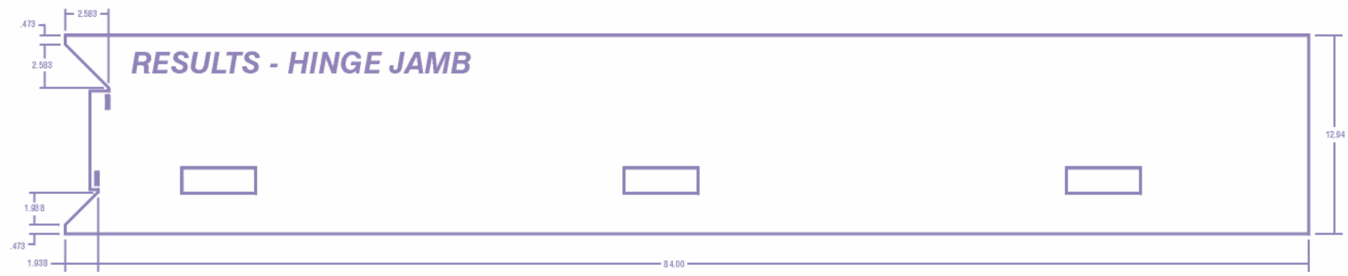
The results? Accurate part drawings and NC punch programs (see the following pages).

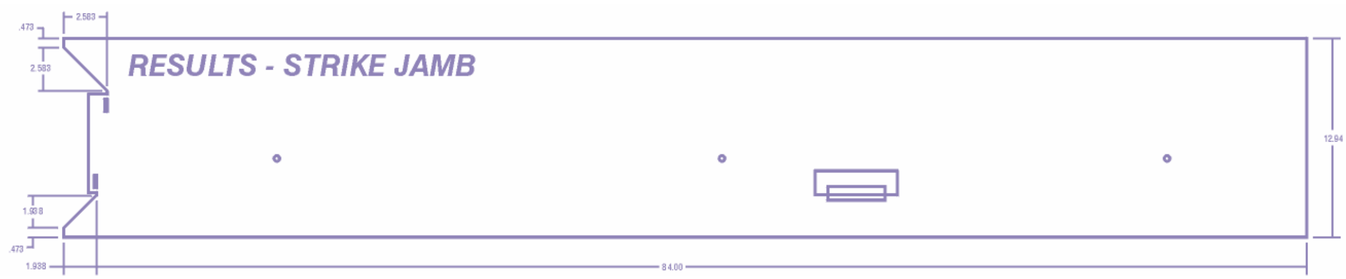


RESULTS - Wide Door Skin



RESULTS – Narrow Door Skin





RESULTS - Punching

The part drawings and NC programs shown here were produced without any need for user intervention. The system is completely automatic and handles complex elevations (multiple sidelights &.transoms) with the same ease.