

# DOOR MANUFACTURING

**CLIENT:** Morgan-Nicolai Company  
**LOCATION:** Lexington, North Carolina

This project was new from the ground up. Starting with the selection of a site with access to services, resources, and markets, and ending in a modern 210,000 square foot manufacturing facility capable of producing 41,000 wood panel doors per month. A major engineering challenge in this project was locating the equipment required to make 30,000 different styles of doors while optimizing material flow from receiving to shipping. The final layout was designed through computer modeling by using historical sales volume for each type of door. All major machines throughout the plant are computer controlled.

Evergreen's scope included the computer modeling, layouts, detail drawings, specifications, purchase requisitions, computer programming, and field engineering. The work included electrical power distribution from the local utility to each of the motors, nine large dust collection systems, and a compressed air system to the many machine centers.

The major machine centers included:

- ▶ Tenoners
- ▶ Stickers
- ▶ Panel Raisers
- ▶ Jointers
- ▶ Boring / Pinning
- ▶ Moulders
- ▶ R.F. Gluers
- ▶ Multi-Head Carver
- ▶ Sanders
- ▶ Trim Saws
- ▶ Shapers
- ▶ Mortisers
- ▶ Planers
- ▶ Rip Saws



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