As will be noted, in our present facilities, which are too few in number, and require frequent tear-down periods and reconstruction just to run one or two tests, most are not of standard size, shape, construction or combustion capacity. There is presently no way to standardize the monitoring procedure since the sites are in different areas and more than one monitor is required whereas when all the test sites are centralized one piece of equipment will be sufficient. With the additional set up spaces there will be less time required and thus major savings in man-power in setting up and running tests on our present units. Our major units, the L28, L36 and L42 fireplaces each require different size test housings complete with as many as one hundred thermocouple installations for each type of unit. The repeated re-wiring cycle consumes hundreds of man-hours and wasted efforts.

The following is the rational for construction of the new facilities. With the new structure, a greatly reduced safety hazard shall be realized. With the new structure, constructed of material other than wood, the loss of facilities as well as equipment and collected information shall be minimized since it is contemplated that the entire structure will be sprinkled. The added space shall allow further tests to be run without disruption, thus saving labor and wasted time in tear-down and reassembly.

The proposed building should consist of the following test areas:

1) L42 Quality Control test area.
2) L36 Quality Control test area.
3) L28 Quality Control test area.
4) Contemporary fireplace test rooms (2 required).
5) Fresh air breathing or mobile home fireplace test area.
6) Chimney top development area.
7) Material evaluation test area.
8) Competition analysis test area.
9) Research and Development Test Area.
10) Calorimeter Area.

In addition to the above test areas, a "test sample preparation" area, an airflow measuring stand and an Underwriter's Laboratories rain test stand as part of the same area shall be required. Several supporting facilities shall also be required such as rest rooms, locker areas and equipment storage rooms. A "brand preparation" and kiln area for the wood that is to be burned shall also be required. Some fenced-in exterior areas are also required for testing of units, and storage of some materials.

The recent acquisition of ground adjacent to the main plant on Market Street will allow space to locate this new facility. Care shall be taken in the placing of this structure, to avoid the expansion space of the present plant, the advent of a new office complex and the judiciary use of valuable land.

Future considerations that are not part of this request for construction, but must be considered as a total package is developed, is the relocation of the Engineering portion of Majestic's office. At the present time, the Engineering branch is housed in approximately 6,100 square feet of space. To allow for expansion and the consolidation of facilities there should be a minimum of 10,000 square feet set aside for this phase of the work. This should be related to the model making section and to the set-up and testing section of the new plant facilities.
Today at Majestic, product testing and evaluation are very necessary activities. Production quality and product safety must be periodically monitored. New product designs, materials and processes continually need to be appraised relative to cost, improvement, safety and performance. Competitive models are verified against performance standards. Majestic fireplace product acceptance tests to codes and/or standards are performed to obtain proper labeling. Most of these tests are performed in building facilities, which are old homes constructed of very old and dry combustible materials. Frequent outbreaks of fires in the recent past have caused considerable damage to the facilities and have imparted some degree of personal risk to the safety of the test personnel and attending witnesses.

These factors are minimized by following certain safety rules of conduct and procedures. On a few occasions the Huntington City Fire Department was needed at the scene to save one of the buildings.

Chimney top installations in winter have to be accomplished by climbing an icy ladder with a top unit in one hand. The house roof is snow covered and pitched.

The present test sites are few in number and have frequently required tear down of one size of fireplace housing and subsequent build up of another size just to run one or two tests that are needed in a hurry. The L28, L36 and L42 fireplaces each require different size test housings complete with as many as one hundred thermocouple installations for each type of unit. This repeated tear down cycle consumes hundreds of manhours in necessary, but wasted effort.

To greatly reduce safety hazards, possible loss of facilities and waste of installation labor; it is recommended that a building for fireplace testing be erected which will be highly fire resistant and contain adequate space and facilities for needed operations.
The building should contain the following test sites:

1. L42 Quality Control test room
2. L36 Quality Control test room
3. L28 Quality Control test room
4. Contemporary fireplace test rooms (2 required)
5. Fresh air breathing or mobile home fireplace test room
6. Chimney top development room
7. Materials evaluation test room
8. Competitive analysis test room
9. R & D test room

In addition to the above test sites, a "test sample preparation" area, an airflow measuring stand, a U.L. rain test stand, locker room, restroom and equipment room are needed.

The building should be located as near as possible to the Engineering offices and model shop as frequent and easy communication is imperative to every day scheduling and operation.

C. F. Brinser, P.E.
Vice President - Engineering
Building type analysis
DONALDSON COMPANY

Bloomington, Minnesota
Hammel Green and Abrahamson, Architects

Headquarters and Research Facilities

-Due to noise, vibration and dirt created by the testing of industrial mufflers, the research unit and administrative unit have been completely separated.

-The two buildings are connected by two glass-enclosed passages.

-Courtyard is formed as a visual and acoustic barrier between the two buildings. Fountains are used to mask noise. The cafeteria overlooks the courtyard.
I.B.M.

Mt. Pleasant, New York
Edward Larrabee Barnes, Architect

Corporate Headquarters

- Unobtrusive building that fits into the landscape.

- Mechanical systems do not litter the rooftop nor the landscape. There was and effort made to conceal the equipment as much as possible.

- Site water is diverted to a moat which is connected by a sluice gate to a stream and duck pond. Water in the moat is connected to a diesel-driven fire pump.

- Main entrance is on the second floor of this three story building. Employees need to climb or descend only one level on their way to and from work.
- W-shaped floor plan reduces the apparent length of the building.

- Open office landscaping except for executive offices and conference centers. 95% of the office personnel share an outdoor view.

- Open corridor on the perimeter of the building with continuous windows overlook moat and a broad meadow.

- The large window areas create an open feeling throughout the building.

- Acoustic panels and 800 plant boxes are used as visual and acoustic barriers.

- Cafeteria has one of the best views.
- Symmetry about the x-axis.
- Peripheral circulation.
- Parking placed away from view.

- Vertical circulation.
JOHN DEERE and COMPANY
Moline, Illinois
Eero Saarinen, Architect

Administrative Center
-Bulk of building neatly nestled into the landscape, thus blending into the environment.
-Buildings distributed throughout the site and are connected by covered walkways.
-Main facade faces irregularly-shaped reflecting pool which doubles as the cooling basin for the air conditioning system.
-Central service core with double-loaded corridor.
-In Administration building, the view is away from the main entrance and the parking area.
-Complex is symmetrical about the circulation axis.
- Worker and visitor entrance on an intermediate level, as opposed to the ground level.

- High tensile Cor-Ten steel is the major structural material.

- Sun shades are used as protection from heat gain on the vast areas that are glazed.

- The main building acts as a bridge across the site, connecting the studio shop with the auditorium.
-Service core for vertical circulation and mechanical systems.

-X axis is the primary circulation axis through the building as well as through the site.

-Majority of office spaces face principle view.
LOCKHEAD

Marietta, Georgia
Aeck Associates, Architects

Research Center

-Landscaping based on natural features of the terrain.

-Three interconnected buildings containing labs and offices and a separated central facilities unit make up the complex.

-Courts create campus-like atmosphere.

-For uniformity and flexibility, all offices are planned over a three foot modular grid pattern which incorporates moveable partitions.

-Laboratory spaces are contained within a 30 foot-square structural bay pattern.

-Most views are into the site as supposed to overlooking the site.
- Strong geometric form.

- Minimum surface exposure to prevailing winds.

- Circulation is through offices, which support the labs.

- Parking placed away from views.
RICHARDSON-MERRELL

Wilton, Connecticut
Roche Kinkeloo and Associates, Architects

Corporate Headquarters

- Not noticeable, well-hidden as opposed to being down by the main road in full view of the building and parking lot to passersby.

- Old mansion on site, used for meetings and dinners, has a lunch room off of it that reaches into the landscape due to use of generous amounts of glass.

- The longitudinal form of the building is a product of a ridge on the site. This orientation allows the architect to exploit the visual qualities of the site.
- Cor-Ten steel used as the major structural material.

- The complex is divided into three separate buildings.

- Lightwells and skylights bring natural light into the spaces.

- The parking is above and below the building, thus no additional land is covered by asphalt.

- The longitudinal orientation provides a central circulation system through the buildings with local circulation systems branching off from the central core.
- The building is symmetrical about the x axis and the y axis.

- The undulating module provides more open glass area for greater possibilities of views. The module undulates about the x axis.

- The x axis is the major circulation system. A local circulation system fluctuates about the x axis.

  Vertical circulation.
UNION CAMP CORPORATION

Wayne, New Jersey
Schofield and Colgan, Architects

Corporate Headquarters

-Sensitive to site and employee needs, as well as keeping a corporate image.

-Building takes advantage of pleasant view, both distant and nearby.

-Construction is of steel frame with concrete precast sunshades on upper three floors.
- Cafeteria cantilevered over the lake. Separated from the rest of the building, it gives employees a complete change of environment at lunch time.

- Building organization: offices on the upper three floors, offices related to visitors on the entry level and support facilities in a podium.

- Offices, designed on a 5' by 5' module, are on the building perimeter, while the central core is used for conference rooms and other support uses.

- 40 feet square light well runs through the upper three floors, visually unifying them and providing a focal point along corridors.
VOLKSWAGEN NORTHEASTERN DISTRIBUTOR, INC.

Wilmington, Massachusetts
Drumme Rosane Anderson, Inc., Architects

Headquarters and Training Center

- Buildings are separated by their functions; administration, training center and warehouse.

- Steel frame with precast panels for finished walls.

- Landscape court creates visual barrier between administration offices and the warehouse.

- Warehouse fronts the entrance and the administration building fronts the highway.

- The court is the nucleus of the complex with all the different buildings and parking lots revolving around it.
- Cafeteria used as passage between administration building and warehouse. The cafeteria also overlooks a landscaped court and the wooded hills behind the site.

- Too many administrative offices were built in, as a result the floor plan is not very flexible. Note, executive offices placed next to rest rooms; not a very good location.

- Peripheral columns are placed outside of the office space.
Site analysis
SITE

The site is typical northern Indiana terrain; flat to gently sloping. The water drainage on the site is terrible, large amounts of water drain on to the site and stagnate. Views out of the site are very poor and rather ugly. Internal views inside the site are quite nice and should be exploited. Good vehicular traffic circulation exists around the site.

The best location for the new building complex is on the north end of the site around the area of the railroad track that curves through the site and not on the east end of the site, by the manufacturing plant, where the client feels the building should go. The northern location will take advantage of good views into the site. There are enough trees there to muffle most of the noises around the site. The trees are tall enough to offer protection from the sun during the summer. This location is also close enough to the old highway to bring in a new ingress/egress system on to the site.
CLIMATIC DATA
Native mixed hardwoods

Low brush

Fox series and Martinsville series soils association, created by outwash from the Little Huntington River.

Liston Creek type limestone base, 48" to 72" below grade.

TYPICAL SECTION
SENSORY ANALYSIS

Scale 1" = 300'
CLIMATE ANALYSIS

WINTER WINDS

SUMMER, SPRING, FALL WINDS

Scale 1" = 300'
MANUFACTURING GROWTH ANALYSIS

Scale 1"=300'

PART OF THE SW 1/4 SEC 11 NW 1/4 SEC 14, T.28N, R.9E,
HUNTINGTON COUNTY, INDIANA
Schematic Design
SCHEMATIC DESIGN #1; SECOND FLOOR PLAN
SCHEMATIC DESIGN #2; SECOND FLOOR PLAN
Preliminary Design
MULTI-USE FACILITY for MAJESTIC

SITE PLAN
Design Background
This configuration forms a natural court, emphasizing the main entrance, much better view for the eng. dept.

Parking

Parking for people using the personnel office, which requires a separate entrance.

Access to manufacturing remains.
The total configuration gives minimum exposure to the north-western winter winds.

Winds come from the west, ranging from north-west to south-west. This location allows the smoke and other debris to be blown away from the rest of the building.

Locating the testing, lab, and shop on the south side of the building gives them easy access to the manufacturing area.

Service road in rear of building.

With graphic potential: node.
TESTING CHAMBER SECTION
SMOKE EXHAUST VENTS

ARCHAIC

HT PROPOSED SYSTEM
BASED ON WIND DIRECTED POSITIONS

AERODYNAMIC

BOTH ARE LOT MORE INTERESTING
LOCKING THAN THEIR'S

TECHNOLOGY STATEMENT
STUDIES OF VERTICAL CIRCULATION NODES
INTRODUCTION AND DEVELOPMENT OF THE CURVILINEAR FORM
"SKYWALK" STUDIES