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Corporate Headquarters

Cincinnati, Ohio

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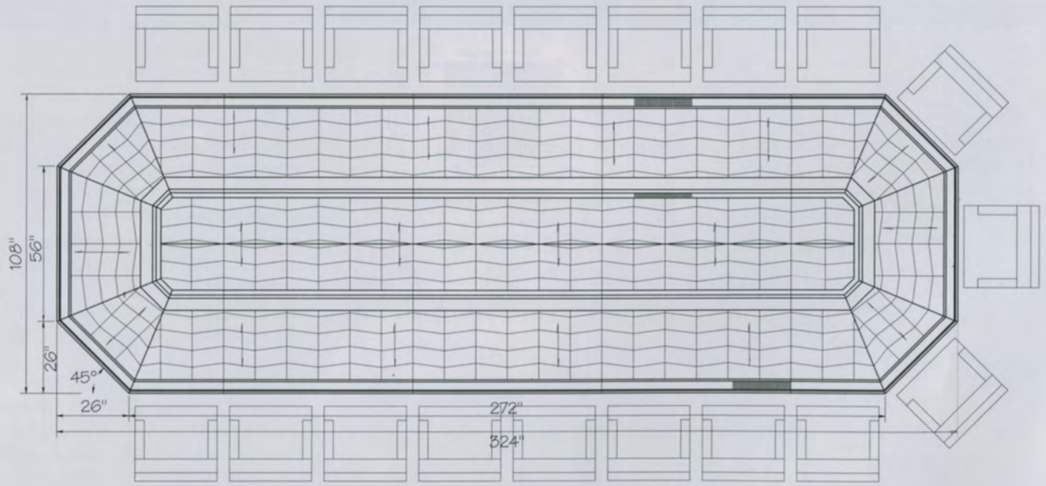
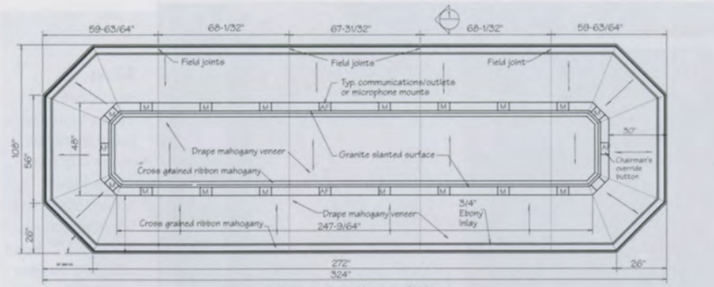
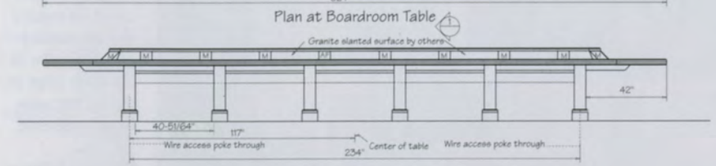
The boardroom table features center matched and book matched veneers running perpendicular to the table edges, allowing the unique Drapé mahogany figure to develop in a zig-zag pattern.



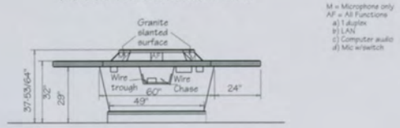
Plan at Boardroom Table
(showing veneer direction and chair placement)



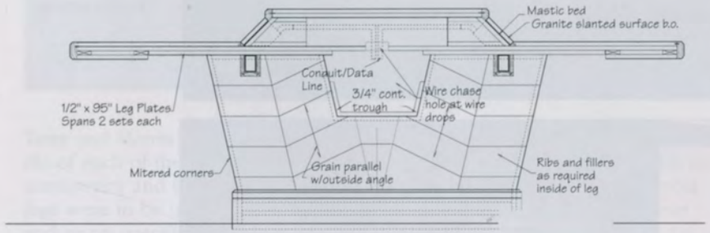
Plan at Boardroom Table



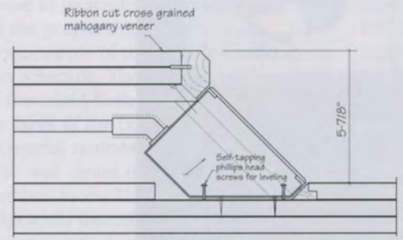
Elevation at Boardroom Table



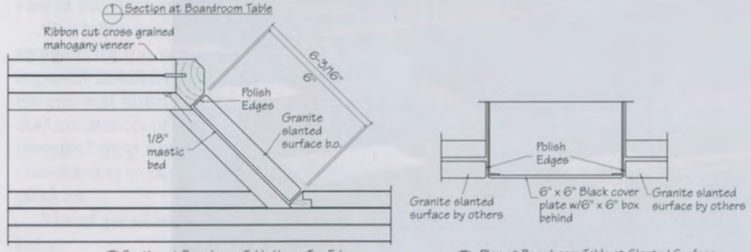
Elevation at Boardroom Table



1 Section at Boardroom Table



1 Section at Boardroom Table



2 Section at Boardroom Table Upper Top Edge

3 Plan at Boardroom Table at Slanted Surface

The window expressions became a dominant theme throughout the suite. The horizontal and rectangular shape recurs in windows, doors, clerestory and open office systems. The modern shape of the window unit was selected in juxtaposition to the traditional elements to help bridge the conflicting objectives of tradition and technology. Glass is used at exterior and interior walls, allowing for direct and indirect light, and false windows are employed to provide an illusion of light and openness in areas where natural sources were not possible.

Decorative art glass was laminated to clear glass with a translucent membrane contained within the two sheets of glass. The result was so successful that all glass throughout the suite was implemented in this way.

Corridors finished with executive finishes transition to support department offices where office systems are trimmed in compatible wood, and rectangular shaped clerestories exist in private offices. Extensive sound isolation, separation and absorption techniques were used to prevent disturbance to the office suite from the building mechanical room.

Woodwork

The design incorporated significant woodwork including Honduras mahogany plain sawn solid lumber and plain sliced Honduras mahogany veneers. The project required 49,000 board feet of solid mahogany and 36,000 square feet of mahogany veneer to complete.

The architect wanted the classicism of plain sliced Honduras mahogany but was looking for a little additional interest in the veneer, so the primary veneer selected for the project was a figured Drapé Honduras mahogany veneer. This delicate angular figure within the flitch is a result of the stress placed on the tree by vines that have curled up the tree restricting it during its development. AWI Associate member R. S. Bacon Veneers in Chicago, Illinois worked diligently to provide several type samples from one of their South American resources for the architect's review. Upon a selection by architect Jim Terry and an approval from the owner, Terry and George Merritt, the project principal from Merritt Woodwork, traveled to Chicago to review all of the veneer logs which Bacon Veneer had air-freighted to their Chicago offices.

Above, an executive conference room table features stone inlays embedded alongside Drapé figured veneers and a 2-1/2" band of inlaid quarter sawn mahogany veneer running perpendicular to the table edge as part of the outer band treatment.

Below, a teleconferencing table in Drapé figured mahogany features A-V hookups. The inside area of this unit is open, with a working gate for service and cleaning access.

Above, one of the executive secretarial stations features Drapé figured mahogany and a stone deal top.

Below, a door with side lites.

Terry and Merritt reviewed each bundle of each of the logs for quality and consistency and to determine which logs were to be used in each area and/or on specific furniture items.

Merritt Woodwork did all of the veneer matching and lay-up work in house to guarantee the quality required for the project and to sustain the requirements of the in-house production schedule. The veneer matching for all the inlaid flush door panels, across the faces of the built-in cabinetry, the secretarial stations, and the reception desk was center matched and book matched faces. This provided a continuous grain matching from top to bottom of the door panels.

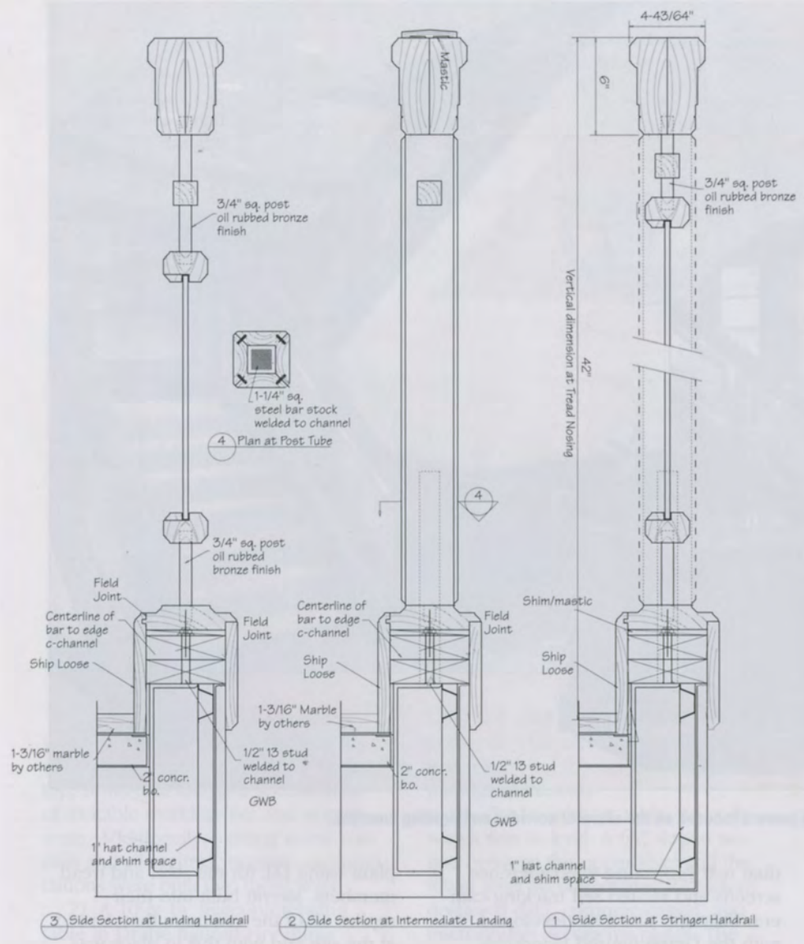
The following characteristics were required for the woodwork: no exposed fasteners on all running trim; exceptional finish quality; exceptional documentation of all conditions (detailed shop drawings); and a team contribution to detail and problem resolutions.

Merritt provided the following items:

A). All of the pre-assembled door frame and casing assemblies, including 40 single openings, 15 openings for pairs of doors, and five units for the executive offices with companion sidelights. The door frames were predominantly 3/0 x 9/0 with the typical pairs being 6/0 x 9/0. All door jambs and borrowed lights were developed as split jambs, with the door frames split behind the rabbeted stop and the borrowed light sash frames split behind the borrowed light frames. The casings were pre-assembled with splined miters and the assembly was splined onto the split jamb assemblies. In this manner, all door frame/casing assemblies were able to be installed with splines and mastic using no exposed fasteners.

B). Twelve paneled alcove assemblies varying in size from 3/6 x 9/0 to 10/0 x 9/0 with all units being 30 inches deep. These alcove units were comprised of flush paint grade side and ceiling panels which later received wallcovering. The units were trimmed with a casing assembly on each side. The ceiling panels on these units were premachined for recessed lighting. Each

The grand stairway, showing the stair railing and decorative artglass.



Reception Desk

unit was shipped as three components: the flush primed wall and ceiling panels which were screwed together at the site, set to a benchmark, shimmed and screwed to the provided blocking, and the two casing assemblies.

C). Fifteen borrowed light assemblies with decorative art glass lights were produced ranging in overall size from 3/0 x 9/0 to 10/0 x 9/0 and incorporating six to 18 lights of glass in each. These units were also produced and shipped as split frame assemblies to eliminate exposed fasteners. All glass was set at the site.

D). Twenty-two doors of a six-light stile and rails door configuration along with five six-light stile and rail borrowed lights which incorporated the artglass panels. All doors were full stile and rail construction using built-up laminated stiles and rails composed of LSL (laminated structural lumber) cores, poplar cross-bands, and mahogany face veneers. The two-ply decorative artglass was incorporated throughout the project in the doors, borrowed lights, and the stairway railing system.

E). Thirty-four doors of a six-inlaid flush panel stile and rail door type were produced which provided a continuity of design between the glazed units and the paneled units. Three of these units were reduced in height to provide a fixed transom single artglass borrowed light.

F). Merritt provided 6600 lineal feet of built-up crown moulding which was developed to permit a blind installation. The back band assembly extended above the typical profiled crown, incorporated a member positioned as sub-blocking for the typical angled crown, and was screwed into the wall. The top piece angled crown was held in place with spreaders while the mastic cured and in some cases when removable ceiling grid panels were present it was able to be screwed from the back. Two sizes of crown moulding were used throughout the project. These profiles trimmed the typical gypsum wallboard wall/ceiling corners, the wallboard raised ceiling coffers, the wallboard raised skylight areas, the wallboard stairwell coffer, and the wallboard partitions to grid ceilings.

G). Merritt also provided 8000 lineal feet of base moulding. The specific architectural detail required that the 3/8" chamfer with 1/8" flat at the outside edge of the casing be duplicated on self returns as each piece of base moulding met a casing leg. To accommodate this, 580 self returns, both right hand and left hand, were machined and prefinished for the project. Many shorter pieces that required self returns on both ends needed to be field measured after the installation of all casing assemblies. All base moulding was scribed to accommodate floor conditions and was affixed without exposed fasteners via mastic, kick-offs, and spreaders.

H). The board room contained 600 square feet of blueprint matched Honduras mahogany flush paneling with the Drapé figure. The boardroom contained four rectangular flush decorative columns which were veneered into the blueprint veneer match. Two of the columns flanked a pair of remote controlled sliding doors which opened to expose a second pair of remote controlled white-board doors which when opened exposed a fixed rear projection screen. The outer doors were blueprint matched into the paneling sequence.

I). Merritt was asked to provide custom built-in bookcases, wardrobes, and storage cabinetry for several executive offices including a blueprint matched wall of paneling with reveals that took advantage of an acute corner in the building plan to incorporate both audio/visual components and storage.

J). Five large executive secretarial

The reception desk and credenza have a built-in camera focused on the elevator corridor and lighting controls.

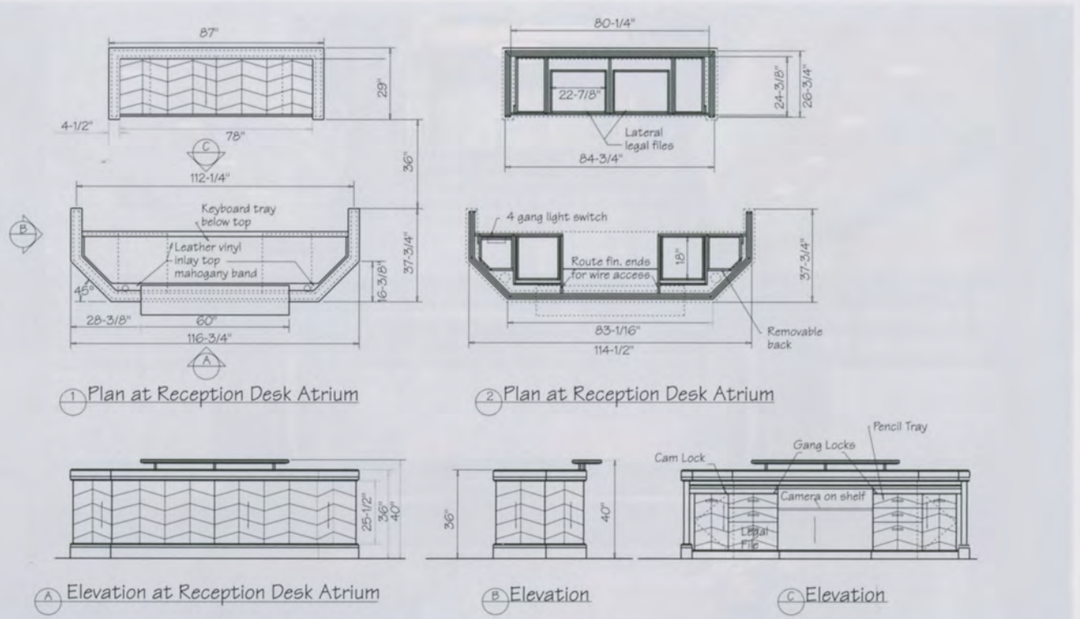
stations using the Drapé mahogany veneer and incorporating a stone deal top as part of the design. This stone was supported by a standoff system with steel plate supported by the 3" wide station wall. The working tops of the secretarial stations were sequence matched and butt-matched plain-sliced-Honduras mahogany with leather wrapped inlaid flush panels approximately 26" x 60", at the direct work area of the secretary. Pedestal locking cabinetry for each station as well as three 2-drawer lateral locking files were produced with the Drapé mahogany veneer surfaces. All drawers were dovetailed solid mahogany suspended on heavy duty progressive action ball bearing drawer slides. All files and cabinetry were equipped with levelers which were adjusted prior to the application of the base moulding.

K). A large teleconferencing built-in cabinetry unit was developed including bi-folding and pocketing doors which opened to expose the dual rear projecting teleconference screens and related self tracking camera. This unit was also developed with the Drapé figured Honduras mahogany veneer blueprinted across the entire face of the unit.

L). The grand stairway which rose from the reception area to the executive level above was an especially challenging part of the project due to the fact that the design called for a continuity from the start of the split entry stair system on the lower floor, to a landing, a 180° turn off the landing to the upper floor, and the complete encirclement of the upper balcony area. The complexity was compounded due to the existing conditions of the floor variance and the wider than anticipated variances in the structural steel that had been provided for the stairs. To ensure the finest joinery and a perfect fit to the site conditions, Merritt Woodwork did extensive surveying of the existing conditions and developed a replica of the steel and floor conditions in their plant using LSL for the steel and tread members. Merritt built into their replica all of the variances that existed at the site and with this in place was able to make the adjustments within the stairway railing design to accommodate and prepare for the same variances that would be encountered upon installation. The stair railing assemblies were completely built on their shop replica including the decorative metal work which was part of the design and only six exposed field joints were evident in the entire system. All other field joints were at intersections into the 14 x 14 stub columns which were part of the detail on the top level. Using this technique, the complete field installation for this item was accomplished in 80 hours.

Furniture

Merritt also had the opportunity to produce several exceptional pieces of furniture for the project. These included:



Reception Desk

1). A reception desk and credenza with a built-in camera focused on the elevator corridor, inlaid leather work top, stone deal top, and several areas of lockable working files and storage areas. Additionally, lighting scene controls and all security monitor accommodations were built into these units.

2). A 10' x 14' teleconferencing table in Drapé figured Honduras mahogany with mahogany edge detail, leather inlays, and built-in hook-up locations for AV, ISDN, LAN, and notebook computer. The inside area of this large unit was open to relieve the mass of the overall size and was provided with a working gate for servicing and cleaning access.

3). An executive conference room table 5' x 12.5' with built-in data and communication ports. The veneering for this table top consisted of center matched and book matched faces running perpendicular to the table edges which allowed the angled Drapé figure to develop in a zig-zag pattern parallel with the table edge. Stone inlays were imbedded alongside the Drapé figured mahogany veneers, the 5/8" ebony inlay near the edge of the table, and the 2-1/2" band of inlaid quarter sawn mahogany veneer running perpendicular to the table edge as part of the outer band treatment. The edgework was a 1-1/4" x 3" solid Honduras mahogany member.

4). The boardroom table, 9.5' x 29', which was bi-level. A 60° sloped section between the upper level and the lower level accommodated 22 custom designed data, communication, and microphone decorative plates. The project stone was used on the sloped section between all of the communication plates. The upper level of the table was veneered with the Drapé mahogany veneer with the outer edge inlaid with a 1-1/4" wide quartered African mahogany veneer running cross grain and perpendicular to the outside of the top. The edge was trimmed with a solid mahogany profiled member. The lower level working top of the table was developed with the same Drapé figured Honduras mahogany veneer for the field with a 3/4" ebony inlay and a 3" quartered African mahogany veneer inlay running cross grain and perpendicular to the table edge. The edge detail was solid Honduras mahogany profiled to the project core profile design of chamfer with 1/8" flat. The table was supported on six large rectangular paneled bases. Tubular steel members were used continuously underneath the table top between the base sections to ensure that the top would remain perfectly straight along its entire 29' length. A trough was incorporated into the design of the table paneled base assemblies to provide access for installation and service of the AV components. Merritt Woodwork had custom AV rough-in boxes developed with internal adjustment and alignment screws to accommodate the AV decorative face plates and to provide a location for the required connections.

The project provided three major challenges for Merritt Woodwork: first, the level of finishing required across all items within the project. The architect and client wanted the highest quality fully filled furniture finish they could achieve with the exception of final hand rubbing on all of the standing and running trim, cabinetry, doors, millwork, and the grand staircase. "For the furniture items the architect and the client wanted these finishes to be hand rubbed and polished to a high luster; quite a daunting task considering the quantity of standing and running trim, doors, door frames, borrowed lights,

The landing where the grand stairway makes a 180° turn.

millwork assemblies, paneling and built-in cabinetry required for the project," George Merritt explained. "We were required to produce the consistency of this high quality finish throughout the entire project and to protect the quantities of running trim which were individually wrapped, the millwork assemblies, the cabinetry, and the furniture, during transit, while being stored at the site prior to installation, and after the installation was complete."

Finishing

As noted, exceptional finish quality was a key component of the woodwork. The finishing system for the woodwork was an AWI TR-2 System enhanced with several additional steps to sustain the depth of color, texture, sheen, and the feel required for the millwork. The end result was a finished product of deep and rich color, a fully filled smooth finish but with the absence of the visual and surface feel of the hand rubbing.

"We find that the white wood sanding is extremely critical to achieving the level of quality required for these specific finishes and, as such, we listed them as an important part of our finishing step procedures," said George Merritt.

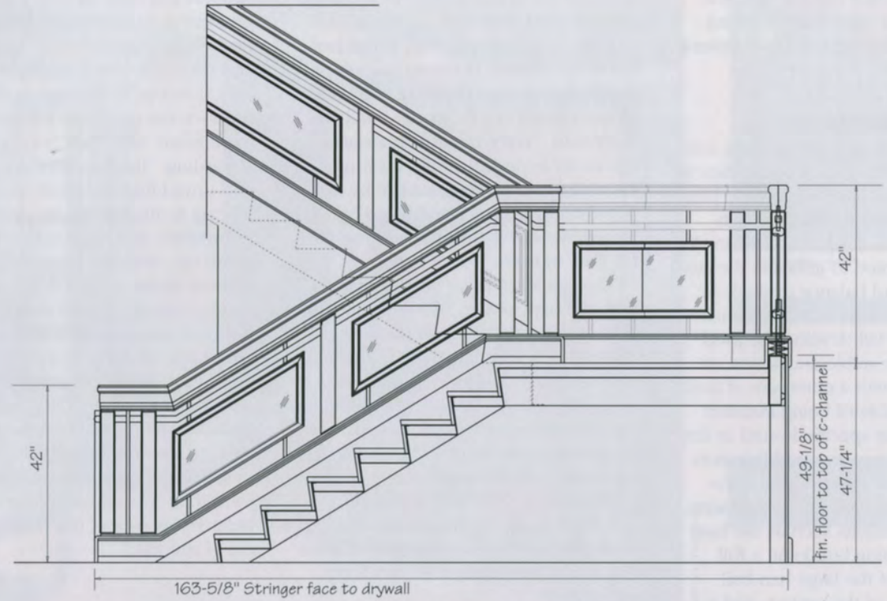
The finishing system for all millwork, paneling, secretarial stations, and the staircase was an AWI TR-2 enhanced to a richer furniture-type finish comprising the following 14 steps:

1. Stroke Sand white wood with 120 grit
2. Hand Sand white wood with 180 grit
3. Aniline dye stain on white wood
4. Tinted grain filler
5. Catalyzed acid cure washcoat
6. Hand Sanding 400 grit
7. Hand glazing
8. Catalyzed acid cure sealer
9. Hand sand 400 grit
10. Tinted topcoat
11. Hand sand 400 grit
12. Clear topcoat
13. Hand sand 400 grit
14. Clear topcoat

The finishing system for the board room table, the conference tables, and the reception desk was an AWI TR-4 enhanced to a monumental furniture-type finish with the following steps:

1. Stroke Sand white wood with 120 grit
2. Hand Sand white wood with 180 grit
3. Aniline dye stain on white wood
4. Tinted grain filler
5. Acid cure washcoat
6. Hand Sanding 400 grit
7. Hand glazing
8. Catalyzed acid cure sealer
9. Hand sand 400 grit
10. Shading via spray
11. Catalyzed varnish topcoat
12. Sand 320 orbital
13. Hand sand 400
14. Catalyzed varnish topcoat
15. Straight-line machine sand 400 grit
16. Hand block sand with 400 grit
17. Hand block sand with 600 grit
18. Catalyzed varnish topcoat
19. Hand block wet sand with 1000 grit
20. Hand Scotch-Brite Gray with 3MFinesse-it
21. Clean wipe down with water
22. Hand Scotch-Brite Gray with 3M Finesse-it
23. Hand rub with 3M Super Polish
24. Hand buff to luster

Of note, the sanding and finishing required 3600 hours, or 32% out of the 11,000 total production hours for the project.



Section Elevation at 19th Floor to Landing

Installation

The installation was performed by AWI Associate Member DLI Inc. of Lake Worth, Florida. The president Dale Lacy and his capable foremen and fine finish carpenters have installed several projects for Merritt Woodwork and have the capacity to expand or contract the site workforce as required based on the project schedule and the project progress. On this project the job foreman , Mark Langhann and his associates worked substantial overtime to accommodate the schedule. DLI worked tirelessly to provide the quality of installation required for this project, sorting for grain alignment at splined and exposed field joints in running trim while at the same time installing all trim and millwork components without exposed fasteners. The quality of their work and the capabilities of their finish carpenters is most evident in this installation and allows the total quality of the shop developed pre-finished elements to express themselves.

The woodwork for the project required approximately 11,000 hours in the shop, with installation requiring an additional 4,600 hours. The specification for an installation with no exposed fasteners and the necessity to handle and work with materials with such a fine finish had significant impact on the hours provided for the installation. Another design element specified throughout the project required the top of the casings with their typical outside edge chamfer detail to touch the bottom of the crown moulding backband, which itself had the same chamfered detail. To that end the partition contractor, the ceiling contractor, Merritt Woodwork, and the installation contractor, DLI, all worked from a 60" benchmark that had been established and reinforced at all locations and openings. All millwork was installed referencing this benchmark which allowed Merritt Woodwork to start the installation without the ceilings being in place in some locations. Some of the ceilings were gypsum wall board while the majority of the ceilings were a lay-in grid tile which projected below the grid by 1/4". The crown moulding needed to be self supportive on its own sub blocking as no pressure could be exerted on the loose tiles within the grid. The project

was on a very tight fast track schedule, and many trades were working harmoniously in the same environment at the same time.

Technical Assistance

In this project, as in all projects, it is the responsibility of the woodworker to work with the architect to provide him with detailed shop drawings which illustrate how his design can be developed and executed to generate the aesthetic impact and balance desired. At the same time the woodworker must define how he will develop the products; structurally stable and sound, in large modules with a minimum of field joints, and capable of being installed under the format specified—and in this project without any exposed fasteners. As part of Merritt's service, they provided mockups of several components and joinery situations such as the base moulding to casing butt joint, a full scale mockup of the large handrail which was part of the project, and a mockup of a prefinished inside corner section of the oversized crown moulding mounted on a substrate which allowed the architect to judge the proportions of the members, the cope joinery at the inside corner, the level and depth of the finish, and to secure the owner's final approval.

"Merritt Woodwork was a true partner in the design, documentation, installation and problem solving on all wood aspects of this project," architect Terry said. "Terry-DeRees Associates has never experienced the level of capability and professionalism by a woodworking firm as exhibited by Merritt Woodwork. Merritt sets the pace for their industry."

George Merritt was also satisfied with the experience. "We have had the opportunity to work with many national and internationally renowned architects and designers during our long tenure in business and I would list my experience and relationship on this project with Jim Terry as one to be cherished," Merritt said.

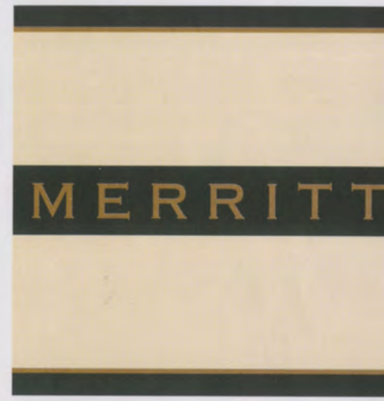
He added, "Merritt Woodwork developed a wonderful relationship with everyone at Terry-DeRees & Associates, and especially with Jim Terry, AIA, finding with him the essence of partnering wherein each respects the knowledge, commitment, experience, and strengths of the other and together they develop, detail, and in the end produce the project as envisioned." His experience with Terry was very rewarding. "Jim was very principled and unyielding on details that were significant to his design, but was receptive to opinions and approaches that provided his client the finest end product without impacting his design elements," George Merritt concluded. "It is always a pleasant experience, and part of the lure of the millwork business for all of us at Merritt Woodwork to work with people holding deep convictions to detail and quality. If these partnering personalities mesh well, the project will unfold in much higher and greater final form than was initially conceived. We believe this project reached that pinnacle of success."

Project:	**Corporate Headquarters Offices**	
Woodworker:	**Merritt Woodwork**	Mentor, Ohio
Architect:	**Terry-DeRees Associates, Inc.**	Cincinnati, Ohio
General Contractor:	**Hunt Builders, Inc.**	Cincinnati, Ohio

woodwork of merit

Corporate Headquarters, Cincinnati

Holland & Knight, Atlanta



Alumax, Atlanta

Allen Bradley, Cleveland

Sterling Commerce, Columbus