

Architectural Flush Wood Doors



ASSA ABLOY, the global leader
in door opening solutions

Introduction

Graham[™]
wood doors

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GRAHAM is now the nation's fastest growing producer of architectural flush wood doors. Our combination of services, manufacturing programs and distributor support results in the finest product program in the industry.

DON HALFERTY
GRAHAM General Manager



GRAHAM is one of the leading producers of commercial grade architectural flush wood doors, utilizing the latest in wood door manufacturing technology. Computerized bonding of components and an ultraviolet cured finish system are only two examples of the advanced technologies being employed in GRAHAM's facilities.

GRAHAM, located in Mason City, Iowa, produces premium and custom grade flush wood doors in a variety of veneers and factory applied finishes. Doors may be modified to fit many standard and custom hardware applications. Precision factory pre-fit and machining ensure proper fit tolerances as described and specified by the Window and Door Manufacturer's Association ANSI/ WDMA I.S. 1-A and the National Fire Protection Association (NFPA) pamphlet 80. GRAHAM's Door Detailer (shown) assures accuracy of hardware preparation.

GRAHAM's product construction and diversity of material usage ensures that the most critical engineering and life safety requirements will be met.

GRAHAM is an ASSA ABLOY Group company. The ASSA ABLOY Group is the world's leading manufacturer and supplier of locking solutions, dedicated to satisfying end-user needs for security, safety and convenience.



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www.grahamdoors.com

Online at www.grahamdoors.com, GRAHAM's Web site offers product information and CSI formatted downloadable specifications, as well as the latest product updates and corporate information. A map links to information on GRAHAM distributors across the country.

This brochure effective as of April 2008

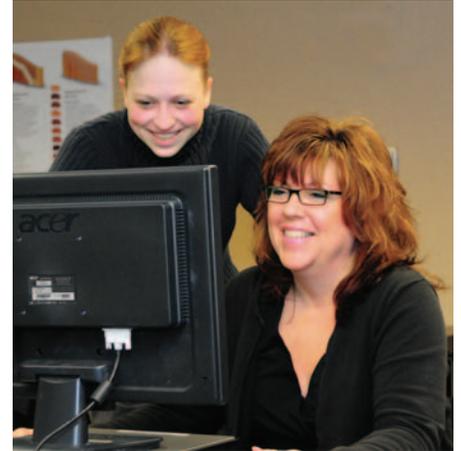
Quotation Services

The construction industry today demands quotation services that respond to fast track timelines. GRAHAM prides itself on its reputation for supplying fast accurate quotations based on job specifications. GRAHAM pledges 24-hour response on most quote requests ensuring that distributors have the most current information for their budgetary and financial needs.

The company quotes and produces wood doors specified to meet ANSI/ WDMA I.S. 1-A or Architectural Woodwork Institute quality standards for premium or custom grade constructions.

The company's computerized quotation system and specially designed quote request forms allow for fast accurate recording of project requirements and accurate generation of the quote.

The development of integrated quotation, coordination and order entry systems helps GRAHAM stand out as one of the premier manufacturers of flush wood doors in the industry today.



Order Coordination

GRAHAM provides computerized order coordination when needed. Experienced order coordinators collect, review, and enter the information taken from door, frame and hardware schedules. They then review this information with the distributor and convert it to manufacturing instructions. If there are differences in the information provided on the schedules, GRAHAM coordination personnel research and determine the proper product specifications.

Coordination of order information assures that accurate information is entered into the GRAHAM production system. Computerization of this process has helped GRAHAM maintain some of the best and most consistent manufacturing lead-times in the industry.



Order Entry

GRAHAM utilizes specifically designed order forms and order entry systems to facilitate quick, easy entry of order information. Order writing options include a time tested system of order codes, order forms and W.O.W. electronic wood door order

writing tools developed to speed the order entry process. This translates to less time spent writing orders. Since the information makes its way to the GRAHAM production floor faster, the order is completed sooner.

Manufacturing Programs and Door Security Solutions Field Support

GrahamTM
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Manufacturing Programs

The GRAHAM Production System allows GRAHAM to provide its customers with the most comprehensive factory manufacturing programs available. This ensures availability of a broad range of products as quickly as possible, suiting the needs of the fast-track construction market.

Swift-Pac

- Five Day Lead Time
- Slabs or Machined
- Packaged in Bundles of 15

GT•5

- Five Day Lead Time / 10 Day Custom Colors
- Good Selection of Veneer Species
- Wide Range of Machining Options
- Prefinish Doors with Nine Finish Options

Wood Stock

- Two and Three Week Lead Times
- Wide Range of Machining Options
- Prefinished Doors with Nine Finish Options



GRAHAM's Wood Stock program provides pre-fit, pre-machined products.

Door Security Solutions Field Support

DSS sales professionals support the nationwide network of distributors by providing exceptional product support services. Special teams of DSS sales, technical, and architectural experts provide consultation services and assistance to designers, contractors, and facility managers to help ensure the best product selection for each project's unique requirements. DSS professionals provide continuous training, information and support services to distributors and end-users.

National Distribution

DSS distributors are among the most knowledgeable and technically capable in the industry. Their value added services include:

- Specification writing
- Creating door/frame/hardware schedules
- Order coordination
- Custom product modification
- Code interpretation
- Guidance for security and ADA regulations
- Support after the sale

In addition, DSS distributors provide overall expertise on proper installation and maintenance of GRAHAM wood doors as well as hollow metal frames, electronic products, and builders' hardware.

Regional Door Group Service Centers

In support of the national network of distributors, a wide variety of GRAHAM products are inventoried at Door Group Service Centers strategically located across the United States. Product inventory varies at the Door Group Service Centers to address the needs of local and regional markets. Utilizing these service centers for fast, dependable service and quality GRAHAM products gives distributors a competitive advantage.

- Stock products shipped quickly
- Experienced factory-trained staff
- Broad inventory of quality products
- Modification facilities for custom flexibility
- Fire labeling capabilities

Each Door Group Service Centers is designed to function as a secondary production and modification facility offering a full range of products to the region it serves.



Door Group Service Center - Austell

Meeting Specification Requirements for Bonded Products

Within the GRAHAM Production System a portion of the process is devoted to bonding the core and frame components of every solid core wood door. Stiles and rails are secured to any of the standard core types including particle core, staved lumber, and engineered composite core. This takes place through the use of a highly automated computerized process that represents the latest in this type of technology.

The bonding process includes:

- Rail application
- Squaring of the assembly
- Stile application
- Complete surface sanding to ensure uniform thickness

These preparations eliminate gaps between the core and frame components and eliminate out-of-square assemblies.

The bonding line at GRAHAM allows maximum utilization of material and resources, thereby reducing waste. This is a result of GRAHAM's desire to provide customers with the highest quality architectural flush wood doors available while conserving natural resources.



GRAHAM utilizes the latest in wood door technology.

Automated Modification Ensures Accuracy

Utilizing highly automated state-of-the-art computerized equipment enables GRAHAM to accurately trim a door to size, bevel the latch and hinge stiles, and machine for standard or custom hardware applications.

Precision factory pre-fitting and machining for locks, latches and other builders' hardware is facilitated

through the use of sophisticated computer controlled routing and boring equipment. GRAHAM's machine tool operators have the skill to ensure that the doors are pre-fit and pre-machined within the tolerances of the WDMA and the NFPA. This assures the quick easy installation and proper operation of the doors on the project.



GRAHAM's machining centers are an important part of their state-of-the-art production facility.

Materials Assembly and the Environment

GRAHAM utilizes only the best materials and the most modern assembly methods in the wood door manufacturing industry. In fact, the company has been instrumental in developing and applying new wood and mineral composites that utilize natural resources responsibly. Many of GRAHAM's standard products are capable of contributing to one or more credits within the U.S. Green Building Council L.E.E.D. Rating System.

The manufacturing and assembly technology GRAHAM uses includes environmentally friendly adhesives and the newest methods of bonding the face components to the core. GRAHAM is committed to seeking out and developing the materials and manufacturing methods that will produce the highest quality products with the lowest environmental impact possible.

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GRAHAM Premium Door (GPD) – 5-Ply

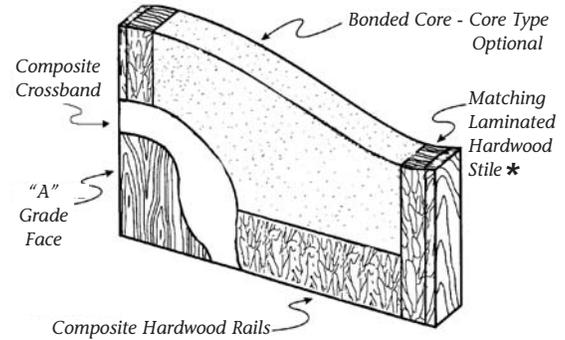
Standard Features

- All bonded construction up to 9'0" tall
- Meets WDMA I.S.1-A premium grade
- Face veneer meets WDMA "A" grade
- Face veneer minimum 1/50" thick
- Type 1 adhesives – face to core
- Adhesives contain no formaldehyde
- Stile face matches face veneer
- Limited Lifetime Warranty
- Engineered to meet or exceed industry performance requirements

Options

- "AA" grade face veneers
- Core Types
PC – Particle
EC – Engineered Composite
SL – Staved Lumber
FD 45/60 – Mineral
FD 90 – Mineral
- Internal blocking wood or fire rated mineral
- Available in most commercially available species

* Oak, Birch, and Maple other species are veneered composite hardwood stile



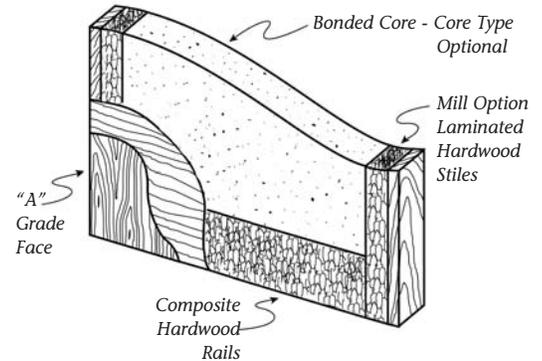
GRAHAM Custom Door (GCD) - 5 Ply

Standard Features

- All bonded construction up to 10'0" tall
- Meets WDMA I.S.1-A custom grade
- Face veneer meets WDMA "A" grade
- Face veneer minimum 1/50" thick
- Type 1 adhesives – face to core
- Adhesives contain no formaldehyde
- Stile face is neutral hardwood
- Limited Lifetime Warranty
- Engineered to meet or exceed industry performance requirements

Options

- Core Types
PC – Particle
EC – Engineered Composite
SL – Staved Lumber
FD 45/60 – Mineral
FD 90 – Mineral
- Internal blocking wood or fire rated mineral
- Available in most commercially available species



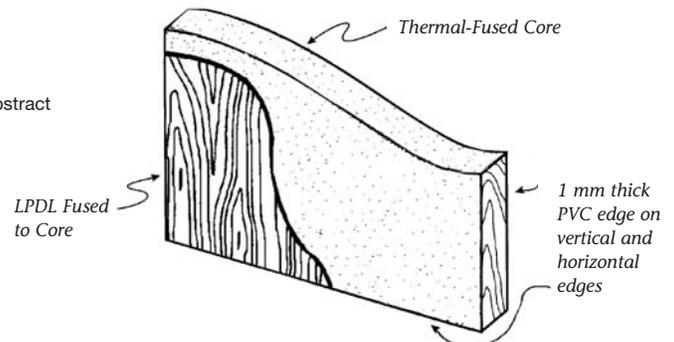
GRAHAM Premium Door (GTF)–LPDL Series

Standard Features

- Meets WDMA I.S.1-A custom grade
- Meets WDMA I.S.1-A Extra Heavy Duty
- Faces are resin impregnated and chemically fused to the core at 600 PSI and 392° F
- Standard in 12 designer colors
- Vertical Edges - 1 mm thick PVC edge band
- Horizontal Edges - 1 mm thick PVC edge band
- Limited lifetime warranty
- Engineered to meet or exceed industry performance requirements

Options

- Core Types
PC - Particle
FD 45/60 - Mineral
FD 90 - Mineral
- Optional wood grain, solid, and abstract selections available



GRAHAM Flush Wood Door Finishes

Actual colors may vary from those represented on this page.
Do not use this page for sample or product comparison.



#100 Clear



#200 Spiced Walnut



#300 Medium Brown



#400 Dark Walnut



#500 Medium Red



#600 Wheat



#700 Dark Brown



#800 Dark Red



#901 Burgundy



**GRAHAM
Natural Solutions**

A complete presentation of
wood veneers and GRAHAM
factory finish colors

GRAHAM LPDL Thermal Fused Door GTF



Accord Maple



Contract Mahogany



English Oak



Gentle Anigre



Gordon Cherry



Laredo Oak



Lucas Point Cherry



Mahogany



Maiman Mahogany



Natural Oak



Paragon Cherry



Light Beige



**GRAHAM
Decorative Solutions**

A complete presentation of
Decorative Thermal Fused Doors



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