CUSTOMER EXPECTATIONS

Architectural Woodwork Institute
AWI LIAISON TO USGBC

Margaret Fisher
North American Dir. Of Market Development
Saunders Wood Specialties, WI
NEARLY 4,000 MANUFACTURING AND SUPPLYING MEMBERS
98% OF THOSE ARE IN USA
ORGANIZED INTO 23 CHAPTERS
WHAT IS ARCHITECTURAL WOODWORK?

- The custom millwork that is designed and built for commercial, federal, retail and residential buildings of all kinds. There are rarely two projects alike. Highly skilled woodworkers read plans, estimate and custom fabricate these designs.
ARCHITECTURAL WOODWORK STANDARDS

NEW STANDARDS SHARED BY:
AWI – AWMAC - WI

CREATION OF FOREST CERTIFICATION STATEMENT
SHARED BY ALL 3 ORGANIZATIONS

“GUIDES FOR THE USE OF ENVIRONMENTAL MARKETING CLAIMS”
www.ftc.gov/bcp/grnrule/guides980427.htm
- ACKNOWLEDGE INTEREST IN CERTIFIED TIMBER PRODUCTS & VERIFICATION OF GOOD FOREST MANAGEMENT

- A NUMBER OF SUSTAINABLE FOREST MANAGEMENT SCHEMES AND CERTIFICATIONS EXIST, WE NEITHER BLOCK NOR ENDORSE ANY

- ABSENCE OF CERTIFICATION DOES NOT MEAN THERE IS A LACK OF QUALITY FOREST MANAGEMENT

- WE DO ENDORSE THE RIGHT OF COMPANIES, GOVERNMENTS & COUNTRIES TO DEVELOP THEIR OWN OR SELECT AN EXISTING PROGRAM AS IT FITS THEIR ENVIRONMENT, SPECIES, PEOPLE AND LAWS

- WE STRONGLY ENDORSE THE DEVELOPMENT OF MUTUAL RECOGNITION SYSTEM AND SUPPORT AND ALL EFFORTS THAT WILL FURTHER ENHANCE 1) THE GLOBAL QUALITY FOREST MANAGEMENT AND 2) GROWTH OF GLOBAL TRADE IN WOOD PRODUCTS.
- A forest sustainability plan includes

A professionally administered forest management plan in which timber growth exceeds harvesting rates in both quantity and quality and insures adequate regeneration of desired species.

- Forest certification program should

  - Not discriminate against different forest types
  - Be regularly reviewed and updated
  - Be transparent
  - Cost effective, recognizing there is not clear indication that certification cost can be incorporated into the procing of wood products being produced.
REACTION: LEED®

LEED
GREEN BUILDING RATING SYSTEM
LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
LEED® GROWTH

• 14,390 Commercial Bldgs Registered (Upcoming)
• 1,753 Commercial Bldgs Certified, (Done)
• 12,951 Residential Registered
• 892 Residential Certified
• USGBC projection: 10% of buildings will be LEED projects by 2010.
• GREENBUILD ATTENDANCE:
  - 2006 DENVER 15,000.
  - 2007 CHICAGO 22,000
  - 2008 BOSTON 27,000
• 79 USGBC CHAPTERS in North America
• 1,000+ new LEED®-AP’S per mo; over 60,000 worldwide
SPECIFYING FSC CERTIFIED WOOD

Requirement

Credit 7.0 (1 point) Use a minimum of 50% of wood-based materials certified in accordance with the Forest Stewardship Council Guidelines for wood building components including but not limited to structural framing and general dimensional framing, flooring, finishes, furnishings, and non-rented temporary construction applications such as bracing, concrete form work and pedestrian barriers.

PERCEPTION

...you can just put “FSC” after the wood species in your bid specifications...
INFORMATION - PERCEPTIONS

FSC : FOREST STEWARDSHIP COUNCIL
FSC: FOREST STEWARDSHIP CONFERENCE
FSC: FOREST SUSTAINABILITY COMPANY
COC: CHAIN OF CUSTODY
COC: CHAIN OF COMMAND
COC: CHAIN OF COMMUNICATION
BUYER EXPECTATIONS

CONSUMER:  ENHANCED PRODUCT LIFE
IMPROVED SOURCE ASSURANCE
REDUCED LIFE CYCLE COST
LOWER IMPACT ON THE ENVIRONMENT
“FEEL GOOD”
AVAILABILITY ISSUES

CHECK ON:
- AVAILABILITY
- LEADTIME
- COST COMPARISON

GRADE
QUANTITY
QUALITY
CHARACTER MARKS
FLATNESS
COLOR CONSISTANCY
INTERIOR DESIGNER, ARCHITECT & SPECIFIER

BUSINESS ADVANTAGE: DIFFERENTIATION
MORE COMPETITIVE

MATERIAL SELECTION REQUIREMENTS:
AESTHETICS
SPECIE AVAILABILITY
SQUARE FOOT COST
DURABILITY

INVOLVMENT: GC & WOODWORKER TO WORK OUT ALL THE
THE BOTTOM LINE

WHAT WE WANT

TRANSPARENCY

NO ADDITIONAL COSTS
DOES MY COMPANY NEED TO BE FSC CERTIFIED?

Requirement
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‘….CERTIFIED IN ACCORDANCE WITH FSC GUIDELINES…..’
AVAILABILITY PERCEPTION
LEED® CREDIT: CERTIFIED WOOD

VENEER SPECIES

ASH, AMERICAN
ASH, EUROPEAN
BEECH
CHERRY
GUM, RED
OAK, WHITE, RIFT
MAHOGANY, HOND
OAK, GERMAN
SAPELE, RIBBON STRIPE
SYCAMORE, FIGURED ENGLISH

AVAILABILITY COULD BE SPOTTY
LEED® CREDIT: CERTIFIED WOOD

VENEER SPECIES REQUIRING LONGER LEAD TIME

(2 WEEKS - 2 YEARS)

CHESTNUT, AMERICAN
DOUGLAS FIR
MAPLE
OAK, WHITE
PINE, OREGON
WALNUT

EUCALYPTUS
LARCH
OAK, RED
PEARWOOD
TINEO

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VERIFY AVAILABILITY & SIZES OF COMPOSITE BOARDS

- IND PTBD, NUF, MR, RECYC
- IND PTBD, FSC, RECYC
- PREMIUM MDF, NUF, RECYC
- PREMIUM MDF, FSC, RECYC
- PREMIUM MDF, NUF, FSC, RECYC
- FIR OR HARDWOOD PLYWOOD IND, NUF, FSC, MR, +STRUCTURAL, SEVERAL TYPES
LEED® CREDIT: CERTIFIED WOOD

- IND PTBD, NUF, MR, RECYC, CLASS A FR
- IND PTBD, FSC, RECYC, CLASS A FR

- PREMIUM MDF, NUF, RECYC, CLASS A FR
- PREMIUM MDF, FSC, RECYC, CLASS A FR
- PREMIUM MDF, NUF, FSC, RECYC, CLASS A FR

- FIR OR HARDWOOD IND, NUF, FSC, MR, CLASS A FR, +STRUCTURAL, SEVERAL TYPES

- SOY GLUE PLYWOOD
LEED® CREDIT: CERTIFIED WOOD

- UPON REVIEWING SPECS, CONTACT SUPPLIER !!
- FEW SUPPLIERS ARE STOCKING MUCH*
- MOST COMMON SPECIES ARE FSC POSSIBLE
  - LEAD TIME COULD BE LONGER
  - LUMBER SUPPLIER MAY HAVE TO BUY OUTSIDE THEIR TYPICAL MILL LIST
- THAT & QUANTITY COULD INCREASE THE COST
- YOU MAY HAVE TO ACCEPT A LOWER BUT MORE AVAILABLE GRADE
- COULD BE 10% - 20% MORE
- MOST EUROPEAN SPECIES ARE PEFC

*MANY QUOTES, FEW PURCHASES. WHILE THE INTEREST IS THERE, THE DEMAND STILL IS NOT.”

SOURCE: BOEHM-MADISEN LUMBER
MEANWHILE.....

Change is coming!
WOOD IS
“CARBON - NEGATIVE”
HERE’S HOW.....
## CARBON COMPARISONS

Including: Preparing for & Gathering raw materials, processing raw materials, primary & secondary manufacturing, transportation to create one metric ton of that material

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>kg</th>
<th>lbs</th>
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<tbody>
<tr>
<td>Brick</td>
<td>88</td>
<td>193</td>
</tr>
<tr>
<td>Glass</td>
<td>154</td>
<td>339</td>
</tr>
<tr>
<td>Concrete</td>
<td>265</td>
<td>583</td>
</tr>
<tr>
<td>Steel</td>
<td>649</td>
<td>1,428</td>
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<tr>
<td>Plastic</td>
<td>2,502/5,504</td>
<td>(a ton for a ton+)</td>
</tr>
<tr>
<td>Aluminum</td>
<td>4,532/9,970</td>
<td>(4.5 tons for a ton+)</td>
</tr>
<tr>
<td>Wood Framing</td>
<td>33</td>
<td>72</td>
</tr>
<tr>
<td>MDF</td>
<td>60</td>
<td>132</td>
</tr>
</tbody>
</table>

Metric ton = 1,000 kg  
Ton = 2,200 pounds (lb)
CARBON & WOOD

TREES TAKE IN CARBON DIOXIDE WHILE IT GROWS, GIVES BACK PURE OXYGEN. THIS IS CONVERTED INTO SIMPLE SUGARS, IT TRAVELS THROUGH THE LEAVES, TWIGS, BRANCHES, LIMBS & TRUNK, BECOMING SAP. AS EACH YEAR GOES BY IT BECOMES A SIMPLE POLYMER CALLED “WOOD”. THE CARBON STAYS IN THE WOOD WHETHER IT’S ALIVE OR DEAD, IN A BUILDING, ON THE FOREST FLOOR OR ANYWHERE ELSE. THIS MATERIAL IS HIGHER IN STRENGTH TO WEIGHT RATIO THAN STEEL.

ONLY WOOD STORES CARBON ! !
49% OF WOODS DRY WEIGHT IS CARBON

TREES GROW WITH SOLAR POWER
ARE WATERED FROM RAIN NOT IRRIGATION
REQUIRE LITTLE OR NO PESTICIDES/HERBICIDES
REMAIN UNTOUCHED FOR 60-140 YEARS
NO OTHER ENERGY NEEDED UNTIL HARVEST
HARVESTING IS EFFICIENT, ONE MACHINE SELECTS,
HARVESTS, CUTS AND STACKS IN MINUTES
LOGS TRAVEL BY FOSSIL FUEL TO MILL
THEN.....
THE LOGS ARE MADE INTO THE PRIMARY OR SECONDARY WOOD MATERIALS THEY WILL BE.

MANUFACTURING FACILITIES RUN ON A FRACTION OF THE ENERGY REQUIRED BY OTHER BUILDING MATERIALS PROCESSES.

60% OF THOSE RUN BY CO-GENERATION, BIOMASS FURNACES, WIND, NATURAL GAS AND SOLAR POWER SO THE PROCESS IS ALREADY MORE EFFICIENT THAN OTHER BUILDING MATERIALS PROCESSES.
ONLY WOOD IS “CARBON - NEGATIVE”

FRAMING LUMBER becomes -457 kg

MDF becomes -382 kg
HOPE FOR A BETTER FUTURE

ADOPTER

architecture

2030

CHALLENGE

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