

CUSTOMER EXPECTATIONS

Architectural Woodwork Institute

AWI LIAISON TO USGBC



Margaret Fisher

North American Dir. Of Market Development

Saunders Wood Specialties, WI

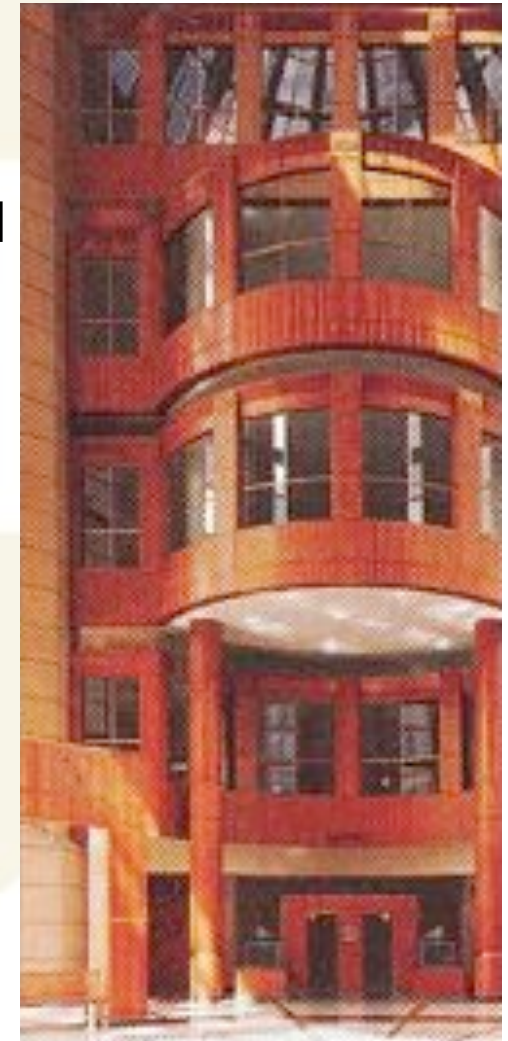
ARCHITECTURAL WOODWORK INSTITUTE

- ❑ **NEARLY 4,000 MANUFACTURING AND SUPPLYING MEMBERS**
- ❑ **98% OF THOSE ARE IN USA**
- ❑ **ORGANIZED INTO 23 CHAPTERS**



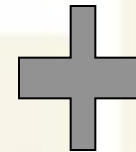
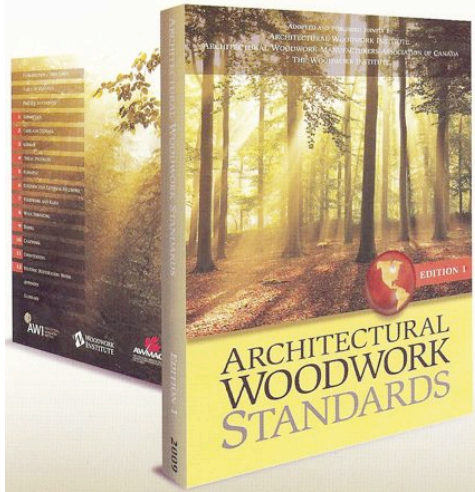
WHAT IS ARCHITECTURAL WOODWORK?

- ❑ **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**



*“GUIDES FOR THE USE OF
ENVIRONMENTAL MARKETING CLAIMS”*

www.ftc.gov/bcp/grnrule/guides980427.htm

**CREATION OF FOREST CERTIFICATION STATEMENT
SHARED BY ALL 3 ORGANIZATIONS**



© Architectural Woodwork Institute

AWI – AWMAC – WI STATEMENT

- 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.**

AWI – AWMAC – WI STATEMENT

-A FOREST SUSTAINABILITY PLAN INCLUDES

A PROFESIONALLY ADMINSTERED 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 “**F S C**”
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”



Plow & Hearth
campaign to
reforest America
one million trees across the country

*Find out about the Plow & Hearth Campaign To Reforest America.
See our order form or visit plowandhearth.com/trees*

We've planted over 600,000 seedlings so far!



AVAILABILITY ISSUES

CHECK ON: ▶
AVAILABILITY
LEADTIME
COST COMPARISON



◀ **GRADE**
QUANTITY
QUALITY
CHARACTER MARKS
FLATNESS
COLOR CONSISTANCY

DESIGN PRO EXPECTATIONS

INTERIOR DESIGNER, ARCHITECT & SPECIFIER

BUSINESS ADVANTAGE:

DIFFERENTIATION

MORE COMPETITIVE

MATERIAL SELECTION REQUIREMENTS:

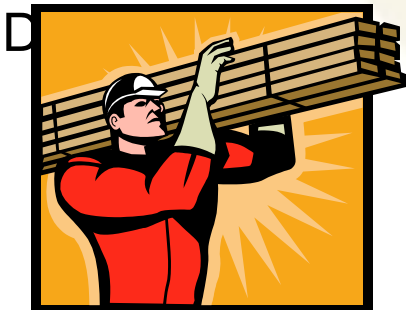
AESTHETICS

SPECIE AVAILABILITY

SQUARE FOOT COST

DURABILITY

INVOLVMENT: GC & WOODWORKER TO WORK OUT ALL THE

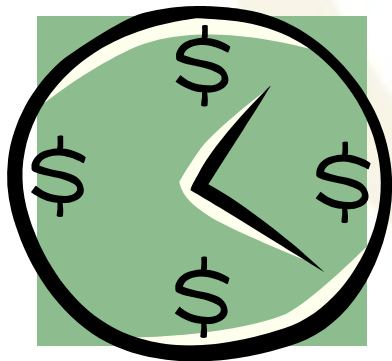


THE BOTTOM LINE

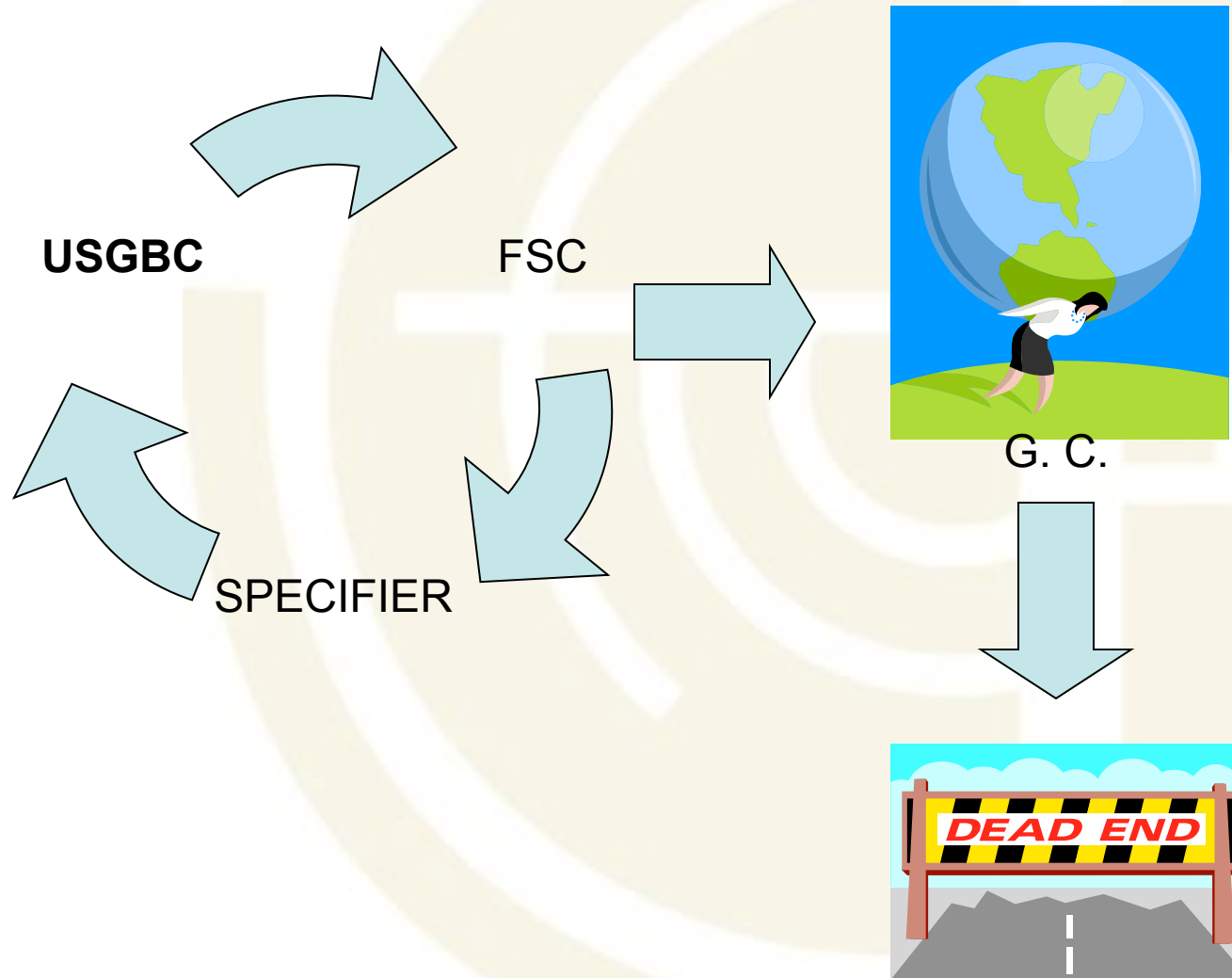
WHAT WE WANT

TRANSPARENCY

NO ADDITIONAL COSTS



RESPONSIBILITY - EXPECTATION



LEED® CREDIT: CERTIFIED WOOD

DOES MY COMPANY NEED TO BE FSC CERTIFIED?

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.

"...CERTIFIED IN ACCORDANCE WITH FSC GUIDELINES...."

AVAILABILITY PERCEPTION



FSC AVAILABILITY

 Lily, plain slice	 Barnwood, quarter slice <small>Johnson's Pine</small>	 White Ash, plain slice	 Red Alder, plain slice	 Primo Pine, plain slice	 White Pine, plain slice	 Fasciata, quarter slice <small>Forest</small>	 Fasciata, quarter slice <small>Forest</small>	 Cypress, quarter slice <small>Forest</small>	 Larch, quarter slice <small>Forest</small>	 Douglas Fir, quarter slice	 Cedar, quarter slice <small>Forest</small>	 Olive Ash, plain slice	 Oriental Wood, quarter slice	 Tigerwood, quarter slice	 Red Camwood, plain slice <small>organic</small>	 English Dawn Oak, quarter slice	 Palau, quarter slice <small>Forest</small>
 Western Cypress, plain slice	 White Birch, plain slice	 Maple, hard, plain slice	 Maple, hard, quarter slice	 Maple, hard, quarter slice <small>Johnson's Pine</small>	 White Oak, quarter slice <small>Johnson's Pine</small>	 Sycamore, plain slice	 Lime Ash, rotary slice	 Poly Ficus, plain slice	 Nero, quarter slice	 Bany Locust, quarter slice	 Merisio, quarter slice <small>Forest</small>	 Johnson's, quarter slice <small>Forest</small>	 Anacahue, quarter slice <small>Forest</small>	 African Mahogany, quarter slice	 African Mahogany, quarter slice <small>Johnson's Pine</small>	 Eucalyptus, rotary slice	 Rubaya, quarter slice
 Sage, plain slice	 Sage, quarter slice	 Sage, rotary slice <small>Johnson's Pine</small>	 White Oak, plain slice	 White Oak, rff slice	 White Oak, quarter slice	 Bibury, plain slice	 Spruce, quarter slice <small>Forest</small>	 Cherry, plain slice	 Cherry, quarter slice	 Cherry, quarter slice <small>Red with Pine</small>	 Perennium, plain slice	 Makore, quarter slice	 Makore, quarter slice <small>Johnson's Pine</small>	 Makore, quarter slice <small>Red with Pine</small>	 Makore, rotary slice <small>Forest</small>	 Cubiro, quarter slice <small>Forest</small>	 Jandira, quarter slice <small>Forest</small>
 Maple, rff, rotary slice <small>with Pine</small>	 Maple, hard, rotary slice <small>with Pine</small>	 Maple, rotary, rotary slice <small>with Pine</small>	 European Beech, plain slice <small>organic</small>	 European Beech, quarter slice <small>organic</small>	 English Mahogany, quarter slice	 Gulistan, quarter slice	 Red Birch, plain slice	 Bendone Mahogany, plain slice	 Bendone Mahogany, quarter slice	 Amarillo, quarter slice <small>Forest</small>	 Lacuanon, quarter slice	 Makore, plain slice	 Sipile, plain slice	 Sipile, quarter slice	 Sipile, quarter slice <small>Forest</small>	 Sipile, rotary slice <small>Forest</small>	 Sipile, rotary slice <small>Forest</small>
 Red Oak, plain slice	 Red Oak, rff slice	 Red Oak, quarter slice	 Maple, rff, plain slice <small>organic</small>	 Butternut, plain slice	 Corina, plain slice	 Sera Perennium, plain slice <small>Forest</small>	 Sera Perennium, plain slice <small>Forest</small>	 Gulistan, quarter slice <small>Forest</small>	 Western Red Cedar, plain slice	 Babylon, quarter slice <small>Forest</small>	 Conceito, quarter slice	 Oak, plain slice	 Black Limba, quarter slice	 Juba, plain slice	 Lauri Pine, plain slice	 Eliosa, plain slice	 Sera Perennium, plain slice

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

LEED® CREDIT: CERTIFIED WOOD

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 MARKET
 - 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



© Architectural Woodwork Institute

MEANWHILE.....

Change is coming!

CARBON & WOOD

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**

MATERIAL	kg	/	lbs	
BRICK	88	/	193	
GLASS	154	/	339	
CONCRETE	265	/	583	
STEEL	649	/	1,428	
PLASTIC	2,502/		5,504	(a ton for a ton+)
ALUMINUM		4,532/	9,970	(4.5tons
for a ton+)				
WOOD FRAMING	33/		72	
MDF	60/		132	

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 !!

CARBON & WOOD

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.....

CARBON & WOOD

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.

CARBON & WOOD

ONLY WOOD IS

"CARBON - NEGATIVE"

FRAMING LUMBER becomes -457kg

MDF becomes -382 kg

HOPE FOR A BETTER FUTURE

