WOLMANIZED®
NATURAL SELECT™ WOOD

Real wood. Natural beauty.
Trusted Name.

Industry In Transition

- Why the transition?
- What is Wolmanized® Natural Select™?
- Will it work?
- Corrosion?

Why The Transition?

- On Feb. 12, 2002 EPA announced "a voluntary decision by industry to move consumer use of treated lumber products away from a variety of pressure-treated wood that contains arsenic by Dec. 31, 2003, in favor of new alternative wood preservatives."
- On May 16th, 2003 new preservative labels are in effect which require compliance in December.

Why The Transition?

- *Is something wrong with CCA-treated wood?*
- History says No:
  70-year working history
- Science says No:
  Studies show that CCA-treated wood is safe when used as recommended
- EPA says No:
  "CCA poses no unreasonable risks to the public"
- Perception vs. Reality

Why The Transition?

How does this effect your operation?

- CCA will become increasingly less available as transition proceeds
- December 31st deadline could change the way you buy treated wood for 2004
- Existing inventory as of 12/31/03 can be sold for non-industrial uses
- Which way will you go?

Treated Wood in Transition!

What is the suitable alternative?

- Wolman® E (copper azole) , the proven successor to traditional treated wood around the world

What is Wolmanized® Natural Select™ Treated Wood?

- Active ingredients:
  - Recycled copper (protects against termites and fungal decay)
  - Azole (protects against copper-tolerant fungi)
- Azole is an organic fungicide that is used on food crops and is FDA/EPA approved
- AWPA Designation: CA-B
- Patent protected formulation

Who has Recognized Wolmanized® Natural Select™ Treated Wood?

- AWPA Standards and the Use Category System (UCS)
- Building Code, Evaluation Reports
  - ICC (ICBO, BOCA, SBCCI)
- NER 669
- Internationally, approved by over 20 government & trade agencies throughout Europe, Australasia, New Zealand & Japan

Why You Should Have Confidence in Wolmanized® Natural Select™ Treated Wood.

- Independent 3rd party audit program
- Treating solution monitored by Arch
- Treat to standards
  - NER
  - Arch
  - AWPA
- Higher expectations on treated products
- Chemical is shipped as a true solution
- Low Corrosion

What is an acceptable protocol?

- ASTM G 85 Modified Salt Water Spray
  - Testing for surface corrosion of fasteners
- ASTM G 153 Specification for hot dipped coating
  - Specification for zinc galvanizing sheet material and fasteners
- ASTM A 653 Specification for galvanizing steel sheet products
  - Specific to sheet steel products
- Mil 19140 E / AWPA E12
  - Tests metals in contact with wood
  - Predicts MPY loss under controlled conditions

AWPA E-12 Testing Specimen 120 f /90% rh 19% EMC

Corrosion and Wolmanized® Natural Select™ Treated Wood?

Independent testing showed….

- Wolmanized® Natural Select treated wood preformed with excellent results on hangers.
- Corrosion results (5.8 mils/year) were within acceptable ranges* for the current hot dipped galvanized fasteners on the market today.
- CCA tested at 3.8 mils/year
- Ranges as published by Corrosion Engineering Handbook are:
  - < 1 is outstanding
  - 1-5 is excellent
  - 5-10 is good
  - 20-50 is fair

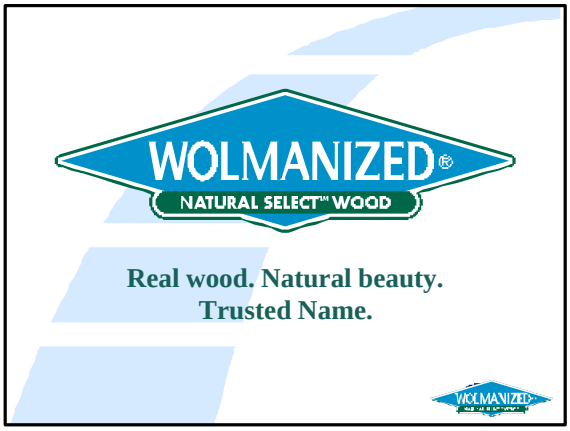
Wolmanized® Natural Select[a] Treated Wood. Current Recommendations and Issues

- Hardware should be hot-dipped galvanized steel or equally well-protected products that meet the ASTM A-153 recommendation
- ASTM A-153 requires an average of 1.0 oz./ft ^{2} and not less than 0.85 oz./ft^2 of coating on any one fastener, 2.0 oz. total and not less than 1.70 oz. total for sheet products (ie; G170 minimum)
- Issue for WTCA, is G60 or G90 enough?
- Need for more testing and modeling

Modified AWPA E-12

Current Work

- Joint ISANTA and AWPA Task Force
- AWPA Round Robin on Modified AWPA E-12 by MSU
- Arch testing G60 and G90 plates from 4 manufacturers
- Arch doing ongoing evaluation of G85, G153, and A653A


WOLMANIZED®
NATURAL SELECT™ WOOD
Real wood. Natural beauty.
Trusted Name.