WELCOME

ICRI

25th Anniversary

2013 Spring Convention

New Solutions

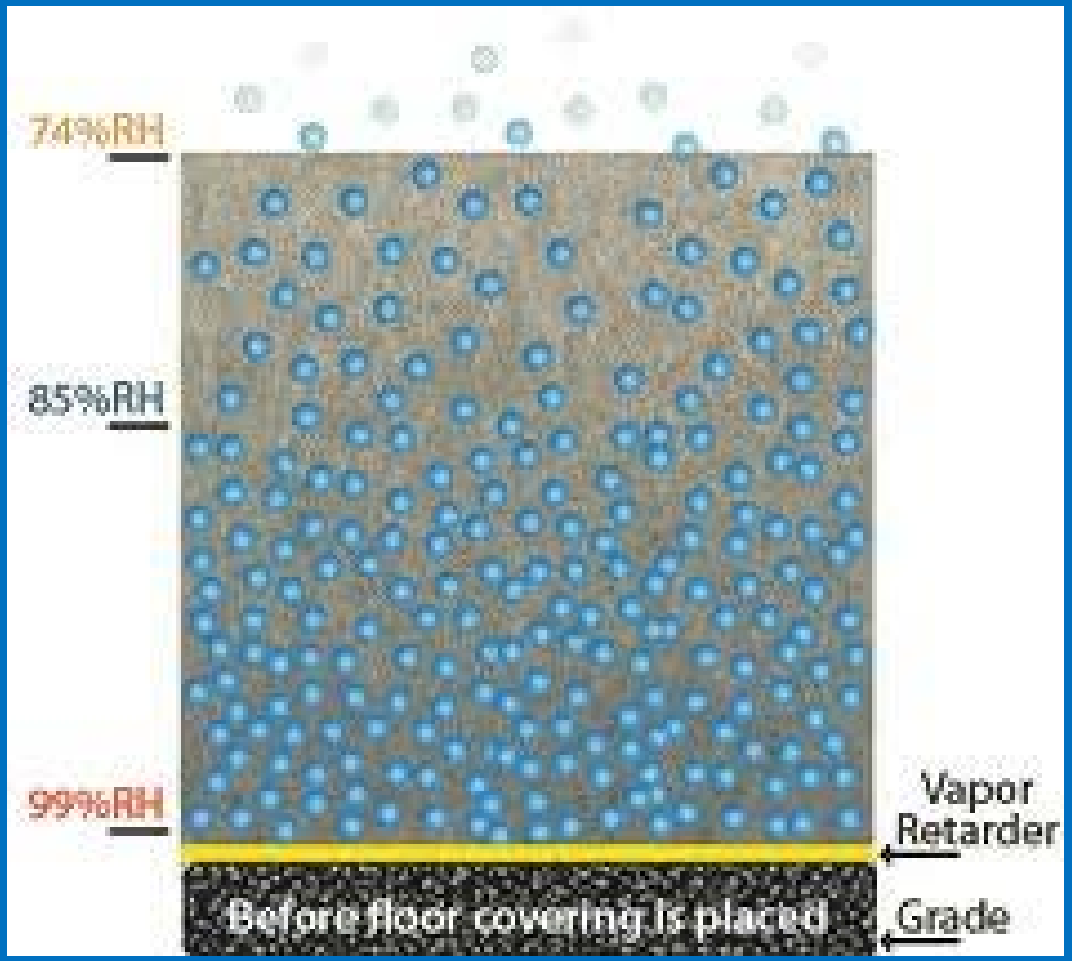
To

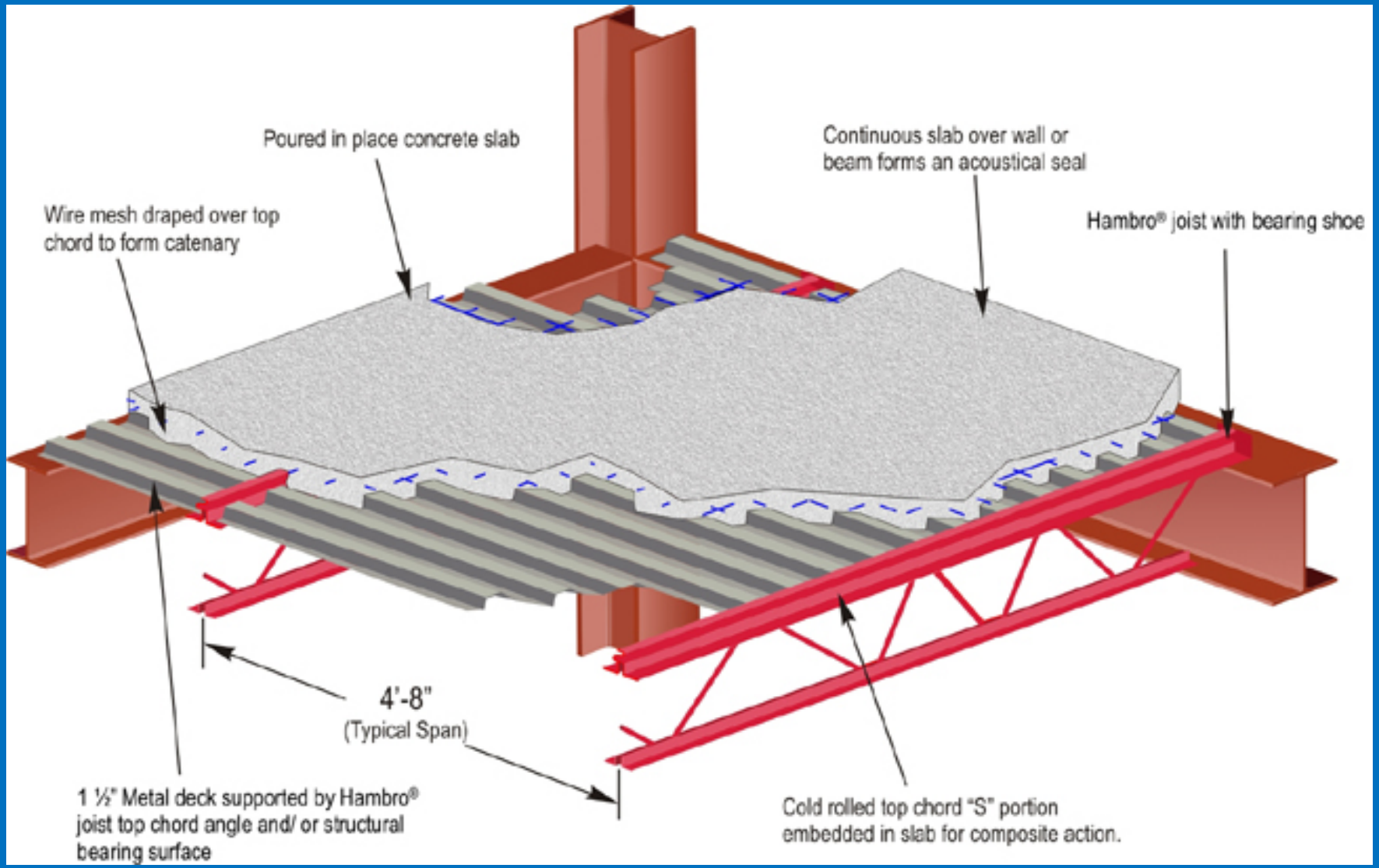
OLD PROBLEMS

Delamination

HOW MOISTURE AFFECTS WOOD FLOORING

Moisture Vapor




Poured in place concrete slab
Continuous slab over wall or beam forms an acoustical seal
Wire mesh draped over top chord to form catenary
Hambro® joist with bearing shoe
4'-8"
(Typical Span)
1 ½" Metal deck supported by Hambro® joist top chord angle and/ or structural bearing surface
Cold rolled top chord "S" portion embedded in slab for composite action.

Calcium Chloride vs Relative Humidity Testing

Water Soluble Elements

METALS

CHLORIDES


Guideline No. 310.2-1997
TECHNICAL
GUIDELINES
Concrete Surface Preparation
CSP 1 - 9

Surface Preparation

Proper Surface Preparation: Whose job is it ?

Specifier (A/E)? *Contractor ?* *Manufacturer*

The quality of the substrate preparation determines the adhesive strength between the substrate and the installed system to prevent cohesive failure of the “vapor” barrier

Special Considerations for Fast Track Construction Projects
"Open-air" environmental conditions

Concrete substrate quality: Concrete quality must comply with relevant ACI & ASTM Standards.

- **Ideal water/cement ratio:** **< 0.45**
- **Surface profile:** **CSP3 or higher, open pored, as per ICRI Guideline No. 310.2-1997**
- **Use of surface hardeners:** **not permitted**
- **Use of curing agents:** **only film forming types that are removable with surface prep**
- **Petrographic examination:** **used to exclude ASR issues**

Topically applied, 100% solids, zero VOC epoxy vapor barrier

Properties

- Effective vapor barrier – reduces MVER from 25 to 3lbs or less and RH from 100% to 97% or less
- 100% Solvent free
- Low viscosity
- Stops moisture and water vapor
- No broadcast required
- Allows a chemical bond to epoxy coatings if recoated within 16h to 5 days.
- Great adhesion to damp or green concrete (5 days and older)

Climatic considerations for application of moisture tolerant Leveler

Application temperature:	**50 – 90°F** **• low temperatures lead to slow strength development and delayed water resistance** **• high temperatures accelerate the set and increase the risk of cracks**
Temperature changes:	**should be minimized during application**
Influence of direct sunlight:	**May lead to fast skin formation and accelerated setting and cracking**
Wind:	**Withdraws water from the surface leading to skin formation and cracking**
Rain:	**Standing water must be avoided until LEVELER has developed sufficient strength, ~ 48h @ 70°F**


BELL STEEL
BELL STEEL
BELL STEEL
BELL STEEL
BELL STEEL
VASCULAR


Ruwac
Ruwac

Topically Applied - Moisture Tolerant - Moisture Mitigation

General uses

- **Surface levelling of 1/8 to 1 inch + (3 – 30 mm +)**
- **Substrate for membranes, waterproofing systems, flooring systems, tiles, VCT, floor tiles, wood etc.**

Thank you

Steve Bradway