Setting the Standard
MOCA - History

• Registered as a not for profit in 2015
• Purpose - develop standards for safe and predictable use of mgo boards in construction
• ICC-ES AC386 Standard - step in the right direction – but there have been problems with boards tested to that standard
• For example - the ICC standard does not include testing for free chloride ion content
MOCA
Development of Standards On Many Fronts......

• In China - Chinese Magnesite Materials Association, Shandong Academy of Building Science, Jiemiai Institute of Magnesia and ASTM China have and continue to collaborate with MOCA on improving existing Chinese and North American standards for boards and production processes/quality control

• In Canada - Two scientists with the Canadian National Research Council have been made available

• Two brands of MGO Board have Canadian acceptance for limited use as a tile backer or floor underlayment and a non structural replacement for gypsum

• In USA - MOCA has met with and is working with ASTM International to formulate a committee for an ASTM standard

• Two boards has been tested and listed with ICC-ES, while others have been compliant to AC386 or used it as a guideline

• NTA has developed standards and testing for magnesium boards which are useful for the MOCA mandate and SIPA members
MOCA
Development of Standards

- Greater production process controls and multiple sampling and testing through each day's production is necessary for Quality Assurance.
- Every MOCA member factory sends samples of each container to an accredited lab and Jiemai for testing.
- Tests are repeated over 2 to 3 weeks as the boards cure and results from dry and soaked boards are compared.
- Tests include:
  - Moisture content (for degree of curing)
  - Screw pull out (strength indicator)
  - Hygrothermic movement
  - Bending strength
  - Up to 20 tests some of which are not included in AC386.
MOCA
Development of Standards

• Potential game changing product
• Much progress has been made for creating standards and processes suitable for North America
• No significant claims in North America – but Demark serves as an example of gaps in standards and testing protocols
• Interested? Join MOCA.
MAGO

• Seller of MGO boards and MGO cladding
• Effort to remove conflict of interest with MOCA by making Mago a widely held public company
• Mago has purchased equipment for making boards in Canada
• Other MOCA members have plans to make boards in North America – notably one in Illinois
Questions?

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