



- Mosaic Overview – Approx. 25 min; 12 Slides
 - What is mosaic?
 - Origins
 - Timeless Aesthetics
 - Unique, Artistic, Luxurious, etc.
 - Unique Benefits
 - Durability, Energy Efficient, etc.
 - Applications
 - Surfaces & Locations
 - Common Terms
 - Substrate, Tessera, Joint, etc.
 - Classifications
 - Primary Opus examples
 - Materials
 - Tile, Adhesives, Grouts
 - Mounting Methods
 - Face Mount
 - Back Mount
 - Methods of Application
 - Direct
 - Double Direct
 - Indirect
 - Double Indirect
 - Design Variations
 - Solid, blend, gradient, repeat pattern, mural
 - Sustainability
 - Sustainable characteristics of mosaic
 - Contribution to projects' LEED certification
- Alignment of Tile & Design Industry Trends – Approx. 15 min; 5 Slides
 - Tile Industry Trends
 - Globalization
 - Sustainability
 - Technology
 - Customization
 - Design Industry Trends
 - Globalization – Lower cost products
 - Sustainable products
 - CAD as a common practice
 - Accessibility to sophisticated, personalized products
 - Mosaic Examples
- Past Difficulties of Mosaic – Approx. 15 min; 3 Slides
 - Difficulties of Mosaic
 - Graphical representation of prohibitive factors
 - Complex Process = Prohibitive Costs
 - Art, Design, Supply, Shipping, Fabrication, Shipping, Installation
 - Long Lead Times & Labor = Prohibitive Costs
 - Timelines and Labor metrics
- CAD Software – Approx. 25 min; 5 Slides
 - Photomosaics & Robert Silvers
 - Small pictures to create larger image
 - Software Example – Exactmosaics
 - Software uses natural marble striation to create larger image
 - Software Example – Tile Creator
 - Paint-by-numbers system
 - Software Example – Tessera
 - Encompassing mosaic design software used alongside bitmap editing software
 - Software Video – Tessera
- Automated Manufacturing – Approx. 15 min; 4 Slides
 - Automated Manufacturing Example – 3Score, Inc.
 - Oregon-based manufacturer
 - Automated Manufacturing Example – Mosaic4U
 - Israel-based manufacturer; curve fitting robotic technology
 - Automated Manufacturing Example – Artaic
 - Boston-based; pick & place robotic technology
 - Automated Manufacturing Video – Artaic
- Bibliography