Facade Panel and Thin Brick Production

by Don Denison
Facade Panels
New trends in architectural design
New trends in architectural design

Clay facade panels are one of the ceramic industry's answers.
New trends in architectural design
Clay facade panels are one of the ceramic industry’s answers
High-margin product
New trends in architectural design

Clay façade panels are the ceramic industries' answer

High-margin product

Many brickmakers ask to make this product
New trends in architectural design

Clay façade panels are the ceramic industry’s answer

High-margin product

Many brickmakers ask to make this product

Several different production methods
Production Topics:

Façade Panels:
- Split tile
- Flat extrusion

Thin Brick:
- Split tile
- Flat extrusion
Ceramicas Mora, Spain
Two production lines for bricks and facade panels

- Toledo Spain 2007
- Panels up to 32“.
- Two lines with two extruders and two cutters
- Continuous pallet dryer and tunnel kiln
Ceramicas Mora, Spain 2007
CN Ceramic, China 2007
Plant for panels up to 4 feet length

- Content: greenside, dryer, loading and unloading equipment
- Capacity of 8 million square feet/yr
- First robot system incorporated in this industry
- Chinese roller hearth kiln
CN Ceramic, China 2007
Plant for panels up to 4 feet length
CN Ceramic, China 2007
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CN Ceramic, China 2007
Application Method
CN Ceramic, China 2007
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Plant for panels up to 4 feet length
Plant for Facade Panels
Modular plant for panels up to 80“
Plant for Facade Panels
Modular dryer for panels up to 80”
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drying curve test drying # 7 - slabs - front position, shrinkage along

Start test: 22.12.08 14:25 Uhr
drying time: 2:45h
end of test moisture: 1.9 % to dry
start moisture: 16 % to dry
end of shrinkage after 1.45 h
solution: no cracks, no deformations
facing slabs: 1300mm x 335mm x 34 mm

Humidity, temperature [% C]

Shrinkage [%]

Temperature
Humidity
Shrinkage
difference Shrinkage

Drying time [h]
Plant for Facade Panels
Modular kiln for panels up to 80"
Thin Brick
Production Topics:
  Façade Panels:
    Split tile
    Flat extrusion
  Thin Brick:
    Split tile
    Flat extrusion
Endicott:

- 2 Plants
  - Pallet Drying Plant
  - Direct-set Plant
- 2 Extrusion Lines
- Presently manufacture ~ 5 m sq.ft/yr.
- Adding ~ 3 m sq.ft/yr.
Thin Brick
Flat Extruded
Existing Shapes Line.
Discussed:
  Façade Panels:
    Split tile
    Flat extrusion
  Thin Brick:
    Split tile
    Flat extrusion