2018 World Ceramic Tiles Forum

7 November - 11 November

Hotel Palácio Tangará

Panamby, São Paulo, Brazil





2018 World Ceramic Tiles Forum - National Context -

USA

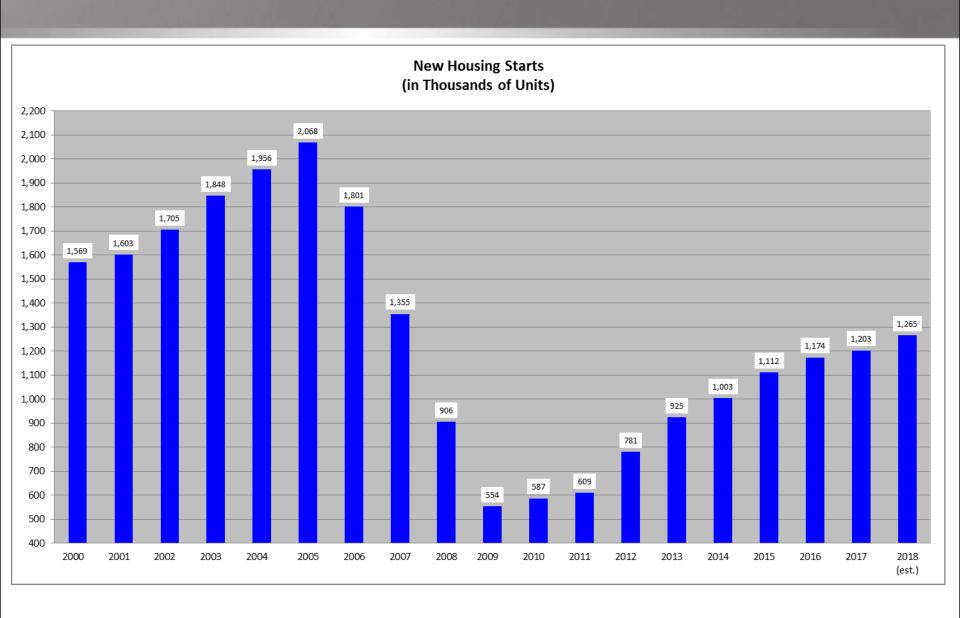


National Context – USA

- I. Trend in the construction sector/demand
- II. Trend in production, consumption and trade in ceramic tiles
- III. Latest developments at national level in energy supply regulation and taxation
- IV. Development in standardisation at national level
- V. Development in regulations at national level affecting ceramic tiles (notably environmental or health & safety regulation)
- VI. Other national developments

New Housing Starts

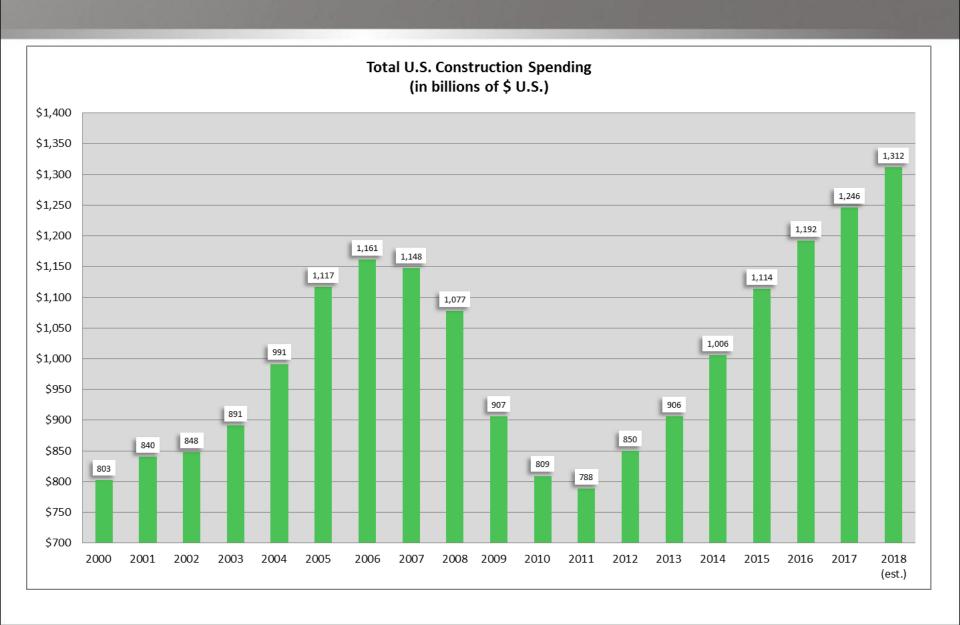
- The U.S. residential market continues to expand, and new housing starts are headed towards a ninth consecutive year of growth.
- Based on year-to-date data, new home starts for 2018 would be at an estimated 1.27 million units, up 5.2% vs. 2017.
- Despite this housing starts are still down significantly from before the recession.



U.S. Construction Spending

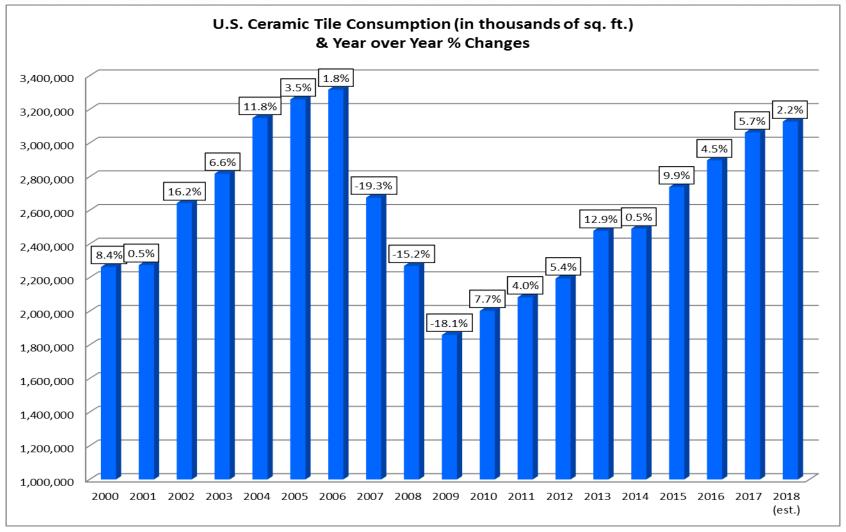
Based on year-to-date data, 2018 total U.S. construction spending (includes both private and public residential and non-residential construction) would be at an estimated \$1.31 trillion, a 5.3% increase from 2017.

Source: U.S. Census Bureau



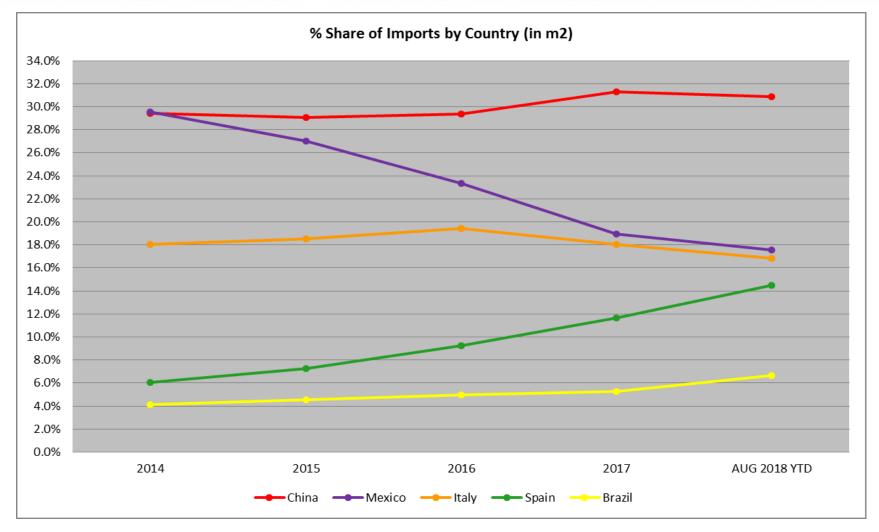
U.S. Ceramic Tile Consumption Overview

- Through Aug. 2018 the U.S. ceramic tile market appears headed for its ninth consecutive year of growth.
- Extrapolating from the available year-to-date data, 2018 U.S. ceramic tile consumption would be 291 million m2 (3.13 billion sq. ft.) a 2.2% increase from 2017, and the fourth highest total on record.



U.S. Imports & Domestic Shipments

- Imports comprised 70.5% (in m2) of U.S. ceramic tile consumption through Aug. 2018 and were up 5.6% vs. Aug. 2017 YTD.
- Through Aug. 2018 China was the largest exporter to the U.S. with a 30.9% share of U.S. imports (in sq. ft.), followed by Mexico (17.6%) and Italy (16.8%).
- Aug. 2018 YTD domestic shipments totaled 58 million m2 (628 million sq. ft.), down 5.2% from Aug. 2017 YTD.



Source: U.S. Census Bureau

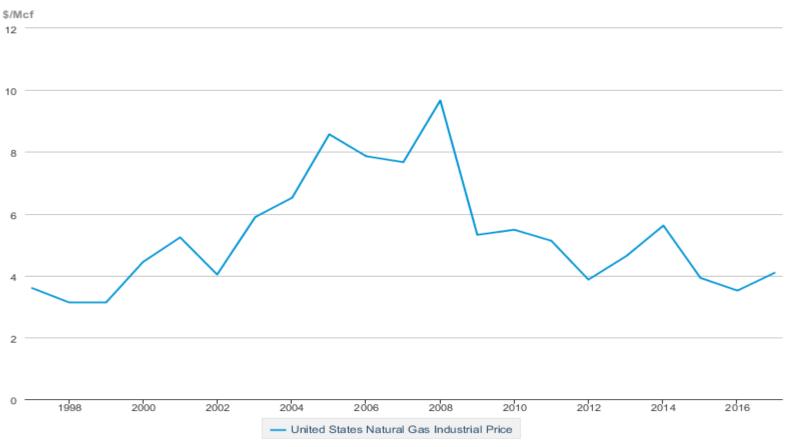
III. Latest developments at national level in energy supply regulation and taxation

U.S. Natural Gas Industrial Price

In 2017 the U.S. natural gas industrial price (per thousand cubic feet) was \$4.10, up from \$3.51 in 2016.

III. Latest developments at national level in energy supply regulation and taxation







eja Source: U.S. Energy Information Administration

Key Standards Development Activities Within Past Year

- New product specifications for "Large and Heavy Tile" mortar
 - Provisions added to existing national standards for thin-set mortars
- Wear Resistance
 - Recent passage of revision to national tile specification which allows manufacturers to self-declare O to V
 - Ongoing international collaboration to determine new testing/technical basis for O to V
- Slip Resistance
 - Stand-alone test method, ANSI A326.3 for all hard surface flooring

V. Development in regulations at national level affecting ceramic tiles (notably environmental or health & safety regulation)

EHS Regulatory and Legislative Activity

- Industry research on respirable silica and metals released from cutting
 - Formalized industry position in support of wet cutting and/or score/snap—no motorized dry cutting
 - Califironia Prop 65 implications
 - OSHA implications
- Outside (non-industry) petition to Consumer Product Safety
 Commission to require slip resistance labeling on all flooring
 - Resubmission of past petition (2016) which was denied
 - DCOF labeling per B101 standards (not used by industry)
 - Strong industry opposition

Other Ongoing Discussion and Activity in the USA

- HS Codes—classifying large porcelain panels/slab
 - Some importers using 6914.90.8000 ("Other Ceramic Articles," porcelain) and 6914.10.8000 ("Other Ceramic Articles," porcelain)
 - Past unsuccessful attempts to use 6905.90.00 (Roofing Tiles) and 6810.99.0010 ("Other Articles of Cement, Concrete or Artificial Stone")
 - We believe large porcelain tile panels and slabs should use 6907.21 (porcelain tile)
- Tile vs. Competitive Flooring Research Project
- Industry Efforts Pertaining to Sustainability
 - Green Squared multi-attribute product certification—certified product data syndication with purchasers
 - Environmental Product Declarations (EPDs) for tile, mortar and grout
 - Efforts to address new "healthy building" trend