Be a Part of the Future of Texas Homebuilding

Texas Association of Builders



#### Homebuilding A - Z



#### This Presentation Includes:

- Earning Income Potential in Residential Construction
- Construction Sequence of a Home from Start to Finish
- The Critical Demand for Residential Employment in Texas

### Average Wages for Skilled Trades in Homebuilding



Highest Paid Construction Occupation in Construction, 2023

Source: NAHB 2023

#### Wages

The totals on the previous slide reflect a full-time, typical income. The average hourly trade's pay is about \$20.00 per hour.

<u>An additional 10 hours of overtime per week will add \$15,600 to</u> <u>a craftman's yearly income.</u> Texas Minimum Wage

\$7.25 per hour

 $\P$ 





**\$1,160 x 12 months = \$13,920 per year** (pre-tax)

5

### Residential Construction Sequence

Stages of Construction

#### **Stages of Construction I Home from Start to Finish**

1	Lot Prep
2	Foundation
3	Frame
4	Cornice
5	Mechanical Rough
6	Exterior Finish
7	Drywall
8	Trim/Cabinets
9	Paint
10	Mechanical Trims
11	Final Stage

# Lot Prep

Soil borings are conducted on certain lots.

A Geotechnical Engineer gives guidance on lots tested.



Cores show different depths of materials for the Geotechnical Engineer to review.



Lot preparation involves the clearing of selected trees in the building pad area.

Excavators can be paid \$1,000 per lot to remove trees & prepare the lot.



### The Foundation Stage

The Foundation Stage : 5 to 7 Days

Concrete form setters and finishers install the forms, pour and finish concrete. Finishers working a 50-hour week can have an annual salary of \$60,499

- Underground Plumbing
- Vapor Barrier
- Beams and Steel
- Form Float
- Concrete

### Foundation forms are set at proper heights



Piping, risers, tub buckets, and PEX water service to islands are in place prior to concrete.



Poly vapor barrier is installed over pad to stop moisture transfer into building envelope. Post tension cables are added, and make-up is floated.







#### **Foundation Pour**

Many foundations are pumped allowing a finish crew to pour the concrete into two homes per day.









Post tensioned cables are stressed using a Hydraulic Ram that applies approximately 30,000 psi per cable.





Pulling or stressing the steel cables squeezes the slab together preventing cracks in the foundation.

# Framing Stage

#### Framing Stage : 5 to 10 Days

Residential frame crews can make over \$8,000 per home. Framing one home every seven days is \$416,000 per year per crew.

- Walls
- Subfloors
- Stairs
- Roof

#### Frame



The framer builds the stairs for second floor access.

Framers who have learned to cut and build stairs are value-added and can earn more money per hour.







#### Roofers are valuable and can earn more money.





**ROOFERS** Training: Apprenticeship

Roofers replace, repair, and install the roofs of buildings using a variety of materials including shingles, bitumen, and metal.

Average Salary in 2023: \$50,030 Jobs 2022: 154,500 Jobs 2032: 157,600

(Source: Bureau of Labor Statistics)

# **Cornice Stage**

#### Cornice Stage : 1 to 2 Days

Cornice crews can earn \$4,000 installing the cornice on an average home. Working Saturdays, 3 per week x 52 weeks is \$624,000

- Sheathing
- Windows
- Cornice
- Siding
- Flashings

Cornice & Roof Install "Drying In" the Home



After the cornice stage the roof is decked with OSB (oriented strand board) to prepare it for shingles.



# Mechanical Rough Stage

Mechanical Rough Stage : 3 to 5 Days

- Plumbing
- Electrical
- HVAC (Heating ventilation & air conditioning)

### Plumbing Top Out



### Electrical Rough-in



### HVAC Rough-in





## **Exterior Finish Stage**

Exterior Finish Stage : Depends on Type

- Brick
- Stone
- Stucco

#### Brick & Stone





#### **MASONRY WORKERS**

Training: Masonry Program, Apprenticeship, on the job

Masons use brick, concrete blocks, concrete, and natural and man-made stones to build walls, walkways, fences, and other masonry structsures.



Average Salary in 2023: \$53,010 Jobs 2022: 294,200 Jobs 2032: 285,300

(Source: Bureau of Labor Statistics)
# Stucco takes more time to install than brick.



# Drywall Stage

## Drywall Stage : 5 to 7 days

Builders can pay as much as \$9,500 to a sheetrock contractor for an average home. A drywall installing contractor can make \$494,000 per year finishing one home per week.

- Hang
- Tape & Bed
- Skim
- Sand
- Punch Out

## Sheetrock



Sheetrock is a milestone because all the mechanicals in the walls must be completed and insulation must pass a third-party inspection.



# Trim/Cabinet Stage

## Trim/Cabinet Stage : 1 to 3 days

- Cabinets install
- Stair Parts
- Interior Doors
- Moulding

### Trim Carpentry & Cabinetmaking





#### **CARPENTER** Training: on the job Apprenticeship

Carpenters construct and repair building framework made from wood and other materials. They may also install cabinets, siding, and drywall.

Average Salary in 2023: \$56,350

# Paint Stage

### Paint Stage : 4 to 6 days

- Caulking
- Prime
- Walls & Ceilings
- Accent Paints

### Paint



#### **PAINTERS** Training: on the job

Painters apply paint, stain, and coatings to walls and ceilings, buildings, bridges, and other structures.

Average Salary 2023: \$47,700 Jobs 2022: 372,400 Jobs 2023: 377,900

(Source: Bureau of Labor Statistics)





## Granite Installs



# Tile Backsplash & Fireplace



Flatwork CONSISTS OF DRIVEWAYS, SIDEWALKS AND PATIOS. They are cut, formed, and poured by the concrete finisher.







# **Mechanical Trim Stage**

Mechanical Trim Stage : 2 to 3 days

- HVAC Compressor Set
- Plumbing Toilets, Sinks, Faucets
- Electrical Switches, Plugs, Fixtures & Fans

## Plumbing Trim





Training: Technical School, Apprenticeship, Requires License

Plumbers, pipefitters, and steamfitters install and repair pipes that carry liquids or gases to, from, and within businesses, homes, and factories.

Average Salary 2023: \$61,550 Jobs 2022: 482,700 Jobs 2032: 493,600

(Source: Bureau of Labor Statistics)





### **HVAC Trim**



#### HVAC

Training: Technical School, Apprenticeship, Requires License

Heating, air conditioning, and refrigeration mechanics and installers work on systems that control the temperatures and air quality in buildings.

Average Salary in 2023: \$57,300 Jobs 2022: 415,800 Jobs 2023: 438,000



### **Electrical Trim**





#### ELECTRICIAN

Training: Technical School, Apprenticeship, Requires License

Electricians install, maintain, and repair electrical power, communications, lighting, and control systems in homes, businesses, and factories.

Average Salary in 2023: \$61,590 Jobs 2022: 762,600 Jobs 2023: 811,800

(Source: Bureau of Labor Statistics)

# **Finishing Stages**

### Final Stage : Varies

- Fence & Final Grade
- Landscape & Sod
- Attic Insulation
- Wood floor & Carpet
- Touch-up & Cleans
- Shower Doors & Mirrors

### Shower Doors & Mirrors



58

A proper final grade is established to help prevent foundation issues. Fencing and landscape follow.



Trees are cultivated from tree farms and are trucked to the site for planting.

Flower beds and sod are added to finish the exterior.







## Hardwood floors and carpet install





#### DOTHE MATH

\$12.00 per hour =
\$1,920 per month/ no
benefits

\$40.00 per hour = \$6,400 per month/ with benefits Higher awareness of construction career opportunities could also help, said Cvitanovic, who noted that a twentysomething employee of a sporting-goods store making \$12 an hour may not realize she could earn \$40 per hour, plus fringe benefits, in construction.

"It's mind-boggling to me that more kids don't know about it," he said. "I think a lot of it is a lack of awareness of the opportunity."

- Steve Cvitanovic, San Francisco-based attorney with Haight Brown & Bonesteel

## Building Inspectors

#### **BUILDING INSPECTORS**

Training: Knowledge of construction trades, on the job, License or Certification

Construction and building inspectors ensure that construction meets local and national building codes and ordinances, zoning regulations, and contract specifications.

Average Salary in 2023: \$67,700 Jobs 2022: 142,400 Jobs 2023: 140,200

(Source: Bureau of Labor Statistics)

The Critical Demand for Residential Employment in Texas

#### A snapshot of where Texas stood in December 2023:

- As much as 41% of the construction labor workforce will retire by 2031.
- For every four workers who retire, only one enters the construction workforce.
- The median age of our construction workforce is 42 years old.
- Less than 10% of our current workforce is under the age of 25.
- Although the number of women in construction is at a record high at 11%, that number increased by only 2% in the last four years.
- Blacks (6%) and Asians (1.6%) are underrepresented, while Hispanics account for nearly one-third of those employed in the construction industry.

(Sources: U.S. Bureau of Labor Statistics, National Association of Home Builders, National Center for Construction Education and Research)

The shortage of construction trades professionals within their area of expertise varies across the state of Texas. However, carpenters and masons universally lead regarding the need for skilled laborers.

# Don't Settle for a Job.

# Consider a *Career* in Homebuilding.



