# Building a residential home from the ground up

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These materials are for training purposes only and are not intended for use as customer handouts.

**Note:** We highly recommend viewing this document online rather than printing or saving it because the online version has the most recent, accurate information. The updated version is at **saif.com > Agent guide > Online training > Training resources.** 

# Class 5645 - project code

Construction of residential dwellings not exceeding three stories in height.

When a contractor has a contract to build an entire home, class 5645 is the project code and includes all of the following construction activities **when performed by the same contractor**:

- Exterior, load-bearing walls, using metal studs, sill, rough framework, wood or light-gauge steel studs
- Wood or light-gauge steel joists, rafters, roof deck, all types of roofing materials
- Sidewall sheathing, aluminum or vinyl siding
- Doors, windows, stairs
- Wallboard installation, lathing
- Fencing, decking, and detached structures
- Insulation, all types

Contractors involved in remodeling use class 5645 as a project code as long as framing or some alteration to the structure is performed along with another construction activity. However, **if specialty contractors do these activities**, a different classification may apply to the singular operation.

## **General vs. specialty**

In this document:

**General** = general contractor having entire contract

**Specialty** = contractor, other than the general, contracted to complete specific work at site. Examples: plumber, sheetrock, sewer, cleaning crew, etc.

| General vs specialty              | General | Specialty or single<br>activity |
|-----------------------------------|---------|---------------------------------|
| Wood framing, sill, walls, stairs | 5645    | 5645                            |
| Light gauge metal studs           | 5645    | 5102                            |
| Rafters, roof deck, roofing       | 5645    | 5551                            |
| Siding                            | 5645    | 5645                            |
| Doors and windows                 | 5645    | 5102                            |
| Wallboard and lathing             | 5645    | 5445                            |
| Fencing                           | 5645    | 6400                            |
| Decking and detached structures   | 5645    | 5403                            |
| Insulation all types              | 5645    | 5479                            |

### **Governing class**

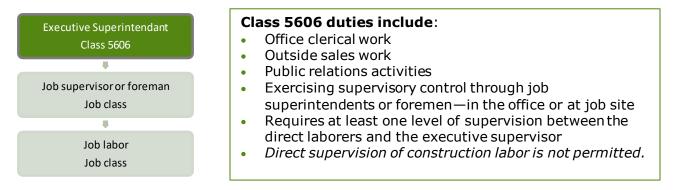
The governing classification at a specific job or location is the classification, other than a standard exception classification (8810 Clerical, 8742 Estimating/Outside Sales, and 7380 Driver), that produces the greatest amount of payroll.

The governing class is used to determine the classification treatment of miscellaneous employees, like flaggers working for a general contractor.

For example: If excavation - class 6217 - produces the greatest amount of payroll for the job site, flagging payroll would be included in class 6217.

## Supervision and executive superintendents

**Class 5606** Applies to executive supervisors or construction superintendents having administrative or managerial responsibility for construction or erection projects



#### Class 5606 does not include:

- Direct supervision of construction labor
- Construction labor or supervision
- Safety engineers
- Supervision of cleaners or other miscellaneous employees

**Supervisors or foremen** on the job are classed to what they are supervising. If this is not evident because they supervise many activities at once, they are inclusive in the governing class.

### Nonconstruction classes for contracting businesses

Class 8227 construction or erection permanent yard away from job sites

- Storage of materials
- Maintenance of equipment
- Includes pickup of parts for the yard operation no job delivery

#### Class 8227 does not include:

- Construction employees fabricating in the shop
- Down or idle time of field workers
- Repairs done away from the premises
- Loading/unloading materials, equipment and tools, and prefabrication done by construction workers this must be classed to the workers job site classification.

**Class 7380** Drivers delivering materials to the job sites are classified according to the construction class they are delivering for, if it includes drivers. Otherwise the driver is subject to class 7380. Construction workers transporting materials to the job site are subject to the classification that applies to their regular construction activity.

- Class 7380 applies when the job class does not include drivers and a driver exclusively delivers materials and does not work at the job site.
- Incidental driving, only to run parts and supplies from the shop to supplier and back, is included in Class 8227.

**Class 8742** before the job begins, Class 8742, Outside Estimator, applies even if the estimator might be on a roof or under a house.

Once the job begins, visits to the job site, other than an occasional drive-by, cannot be classified 8742 and would fall into the appropriate construction class.

**Class 8810** Clerical office employees working in an office physically separated by all other hazards. This could include a job trailer if the clerical workers are doing paperwork/computer in a room separate from supplies, tools, parts, etc.

# From the ground up

| Excavation                   | General | Specialty |
|------------------------------|---------|-----------|
| Surveying                    | 5645    | 8602      |
| Land clearing and excavation | 6217    | 6217      |
| Cutting trees, logging       | 2702    | 2702      |
| Fencing for erosion control  | 5645    | 6400      |

**Class 6217** Excavation NOC & drivers – the removal of a couple trees, brush, and general clearing of the site using heavy equipment

**Class 2702** Logging or tree removal – applies to tree and incidental brush removal when clearing land in connection with developments where there is substantial timber cutting involved

**Class 6400** Installation and repair of temporary or permanent fences, including those installed to prevent soil erosion. Fence installation is included in Class 5645 when completed by the prime contractor.

| Street and road                     | General             | Specialty |
|-------------------------------------|---------------------|-----------|
| Rock excavation (drilling/blasting) | 5508                | 5508      |
| Subsurface work                     | 5507                | 5507      |
| Subgrade through paving, curbs      | 5506                | 5506      |
| Roadside beautification             | 0042                | 0042      |
| Flaggers                            | Governing<br>class* | 7720      |

\*Remember, the governing class is the class with the most payroll on the job.

Class 5508 Street or road construction: Rock excavation & drivers

- When roadbed is laid on or adjacent to mass rock formations, removed by drilling and blasting (no tunneling)
- Includes portable crusher operations associated with the blasted rock

Class 5507 Street or road construction: Subsurface work & drivers

- Surveying
- Moving-in operations
- Clearing the right of way
- Earth excavation
- Rock and dirt removal (no blasting)
- Filing and grading to the subbase

- Flagging
- Small bridges or culverts (clearance less than 10 feet and terminal abutment distance less than 20 feet)

Class 5506 Street or road construction: Paving or repaving & drivers

- Flexible base
- Stabilized base
- Laying the pavement
- Finishing and trimming the shoulder
- Placing the curbs
- Erecting guard rails and fences
- Painting lines unless done by specialty contractor

**Class 7720** Specialty flagging contractors – *specialty contractor* hired to only do the flagging

| Concrete             | General | Specialty |
|----------------------|---------|-----------|
| Forms and foundation | 5215    | 5215      |
| Flat work            | 5215*   | 5215*     |
| Sidewalks            | 5215*   | 5215*     |
| Driveway             | 5215*   | 5215*     |
| Curb                 | 5215*   | 5215*     |

**Class 5215** Concrete private residence & drivers – foundations, driveways, groundsupported concrete. If one contractor completes all concrete work, foundations as well as flat work, class 5215 applies to all.

- Laying out the foundation
- Setting forms
- Installing rebar and mesh
- Pouring footings
- Placing piers
- Pouring walls
- Placing cement block
- Tearing down forms
- Finishing concrete, all phases

\*If a *specialty or general contractor* completes **ONLY** the ground-supported flatwork, class 5221 applies: **Class 5221** Concrete and cement work – floors, driveways, sidewalks & drivers. If a contractor completes both form/foundations and flatwork, class 5215 applies to all.

#### Concrete Cutting:

Cutting into a road - 5506 Cutting into residential building concrete - 5215 Cutting into non-residential building concrete - 5213 Cutting into sidewalks, driveways - 5221

| Utilities                                       | General | Specialty |
|---|---------|-----------|
| Water connection – lateral line (house to main) | 5183    | 5183      |
| Electric connection (house to main)             | 5190    | 5190      |
| Drainage system – septic, French drains         | 6229    | 6229      |
| Water/gas main                                  | 6319    | 6319      |
| Underground conduit – for cables or wires       | 6325    | 6325      |
| Overhead lines                                  | 7538    | 7538      |
| Sewer construction                              | 6306    | 6306      |

The prime contractor is likely installing water and electric from the main at the street to the residence. Generally **classes 5183 and 5190** would apply to installing from the street to the house:

#### Class 5183 Plumbing NOC

- All piping for the movement of water, gas, or steam
- Connections, fixtures, appliances, and appurtenances with regard to the water supply or drainage system
- Connection from street to house

**Class 5190** Electrical wiring – within buildings & drivers

- Wiring within structure
- Connections from street to house
- Incidental outdoor lighting

*Specialty contractors* often contract to complete the following, but if the general completes it they would also use these classes:

• Each class includes the trenching, pipe installation, and backfill.

**Class 6217** Specialty contractors only completing trenching, not installation of utility **Class 6229** Irrigation and drainage system construction & drivers – includes septic tank and drainage field

Class 6319 Water/gas main or connection construction & drivers

**Class 6325** Conduit construction – for cables or wires & drivers; This class is for extensive underground lines and doesn't include normal installation from house to main in street, unless the same contractor is doing it all.

**Class 7538** Electric light or power line construction & drivers; This class is for extensive overhead lines and poles and doesn't include normal installation from house to main in street.

Class 6306 Sewer construction – all operations & drivers

| Frame  | General | Specialty |
|--|---------|-----------|
| Wood, light weight steel studs, frame            | 5645    | 5645      |
| Interior, nonstructural, light gauge steel frame | 5645    | 5102      |

**Class 5645** Wood framing exterior, load bearing walls, using metal studs, sill, rough framework, wood, or light-gauge steel studs

**Class 5102** Interior, nonstructural, light-gauge steel frame



| Roof                           | General | Specialty |
|--------------------------------|---------|-----------|
| Roof – including flashing      | 5645    | 5551      |
| Gutters – sheet metal or vinyl | 5535    | 5535      |

**Class 5645** Roofing by the general contractor is included in class 5645.

**Class 5551** Roofing by a specialty contractor who only does the roofing, is included in class 5551.

**Class 5535** Installation of gutters and drain spouts, sheet metal, or vinyl

| Window and doors             | General | Specialty |
|------------------------------|---------|-----------|
| Window, door installation    | 5645    | 5102      |
| Glass replacement or mirrors | 5462    | 5462      |
| Skylights                    | 5535    | 5535      |
| Overhead door installation   | 3724    | 3724      |

**Class 5645** applies to the general contractor, and **class 5102** applies to a specialty contractor, installing an entire 'premanufactured' window, framework with glass already in place. These classes also apply to removal of old residential window assemblies, prepare the opening for new assemblies, and installing the new window assembly. **Class 5462** applies to glaziers who handle and install glass, and is inclusive of metal framing. Replacement glass may be installed in existing window assemblies/frames this includes removing the existing trim, replacing the glass, resealing the window glass, and reinstalling the trim.

| Exterior siding                                   | General | Specialty |
|---|---------|-----------|
| Exterior wood, aluminum, vinyl siding             | 5645    | 5645      |
| Exterior brick, stone, rock, plastering or stucco | 5022    | 5022      |
| Tile & rock stuck to wall – interior or exterior  | 5348    | 5348      |

All types of siding installation on residential buildings (wood structures) is assigned to class 5645. Siding examples include aluminum, sheet metal, cedar shingles, engineered or composite wood, seamless steel, vinyl, wood, etc.

The sheet metal siding classification (5535) applies to installing sheet metal siding on metal frame structures only.



**Class 5022** Rock or stone installed similar to brick – usually placed stone by stone, mortered into place

**Class 5348** Tile, rock, or stone usually attached to a wall or counter by adhesive that is applied by trowel. Class 5348 applies outdoors, provided it is strictly of a decorative or ornamental nature on existing surfaces of patios, swimming pools, or walls.

| Interior                                   | General | Specialty |
|--|---------|-----------|
| Insulation                                 | 5645    | 5479      |
| Wallboard - hang, tape, mud, spray texture | 5645    | 5445      |

**Class 5479** Specialty contractor installation or application of acoustical or thermal insulation in buildings or within building walls – rolled in, sprayed in, or blown in **Class 5645** includes wallboard/sheetrock when the prime contractor does this work. **Class 5445** applies to a *specialty contractor* doing wallboard, sheetrock, drywall, plasterboard, or cement board installation within buildings and drivers. Includes taping of seams or joints, joint compound, and sanding of walls

| Wall covering                    | General | Specialty |
|----------------------------------|---------|-----------|
| Painting – interior and exterior | 5474    | 5474      |
| Paper hanging                    | 5491    | 5491      |
| Interior plaster                 | 5480    | 5480      |
| Lathing – interior or exterior   | 5645    | 5443      |

Class 5474 Painting NOC & shop operations, drivers - interior or exterior

Class 5491 Paper hanging & drivers Class 5480 Plastering NOC & drivers – interior only

**Class 5443** Placing of wood lath, nonreinforcing metal lath, or wire meshing prior to the application of plaster or stucco - interior or exterior



| Countertops  | General | Specialty |
|--|---------|-----------|
| Tile, stone, marble, mosaic, premade concrete counter tops | 5348    | 5348      |
| Concrete counter tops poured in place                      | 5221    | 5221      |



| Interior finish                                 | General | Specialty |
|---|---------|-----------|
| Cabinet installation                            | 5437    | 5437      |
| Counter tops (laminated plastic, veneer, wood)  | 5437    | 5437      |
| Interior wood trim work                         | 5437    | 5437      |
| Flooring- wood, parquet (cut, sand, nail/screw) | 5437    | 5437      |

Class 5437 Carpentry- installation of cabinet work or interior trim

- Installation of kitchen and other cabinets
- Installation of counter tops laminated plastic, veneer, wood, particle board
- Installation of finish trim crown molding, wainscoting, wood hand rails, baseboard, etc.
- Wood floor installation requiring cutting, sanding, drilling, and attaching using nails, screws, or pegs



| Flooring  | General | Specialty |
|---|---------|-----------|
| Carpet, vinyl, linoleum, nonceramic tiles         | 5478    | 5478      |
| Ceramic tile, stone, marble, or mosaic            | 5348    | 5348      |
| Laminate or wood – glue down or interlocking      | 5478    | 5478      |
| Concrete block, brick, stone, terrazzo floor/walk | 5221    | 5221      |
| Concrete floors                                   | 5215    | 5221      |

**Class 5478** Carpet, linoleum, vinyl, asphalt, rubber floor tile or resilient (Pergo type) installation; includes laminate or wood flooring that is glued down or interlocking; includes installation of underlayment applied over the rough or subfloor

**Class 5348** Ceramic tile, stone, marble, and mosaic installation – interior or exterior – floors, walls, countertops. These are not stacked and mortared like bricks or stones, but are glued into place.

**Class 5022** Masonry NOC – brick, stone, block floors, or walls, mortared in place **Class 5221** Stone or brick pavers, terrazzo on floor or walk

**Class 5215** Concrete construction of private residences – includes flat work if contractor is installing all concrete

**Class 5221** A *specialty contractor* who exclusively contracts to complete the ground – supported concrete, such as paving floors, walks, and driveways

| Landscape                        | General | Specialty |
|----------------------------------|---------|-----------|
| Grading or recontouring          | 6217    | 6217      |
| Landscaping – soil, plants, etc. | 0042    | 0042      |
| Underground sprinkler install    | 5183    | 5183      |
| Brick or stone <i>walls</i>      | 5022    | 5022      |
| Brick or stone paver walks       | 5221    | 5221      |
| Artificial turf                  | 0042    | 0042      |
| Deck                             | 5645    | 5403      |
| Fence – anything but stone/brick | 5645    | 6400      |

**Class 6217** Excavation – changing the existing terrain or contour of the land. This could include making the area level, pushing it into a pile to create a hill or berm, or making changes in the elevation. This work is usually done at the beginning of a project, but can be done anytime, including towards completion to finalize the landscape.

**Class 0042** Landscaping is site beautification work and is typically performed as a finishing operation towards the end of the job. It includes, but is not limited to:

- Enhancing the soil with the addition of nutrients and/or fertilizer
- Spreading of top soil prior to installing plants or sod
- Digging holes necessary to install plants for new installations
- Installing plants as part of a landscaping operation, not a maintenance operation
- Placement of ground cover (soil, mulch, or decorative stones)

The key difference between classes 6217 and 0042 is the earth-moving operations. Landscaping operations included in class 0042 do not change the contour of the land. **Class 5645** as a project class includes decking and fencing. However, if a specialty contractor is completing only the deck **class 5403** applies, or only the fence, **class 6400** applies.

| Ponds                                 | General | Specialty |
|---------------------------------------|---------|-----------|
| Small rigid plastic form, simple pump | 0042    | 0042      |
| Excavation and place large rocks      | 6217    | 6217      |
| Install rubber lining                 | 5102    | 5102      |
| Cemented or mortared rocks/bricks     | 5022    | 5022      |
| Cement sides/floor                    | 5223    | 5223      |
| Plumbing and pump                     | 5183    | 5183      |
| Landscaping – plants, rocks           | 0042    | 0042      |

Class 0042 Small ponds that are installed by the landscaper—hand-dug, using rigid plastic formed liner, and a simple pump—are inclusive in the landscape gardening class. Class 6217 Excavation NOC & drivers – includes excavation for larger ponds Class 5102 Synthetic rubber or liner installation placed in bottom of pond Class 5022 Brick or rock, mortared or cemented in place around pond Class 5223 Concrete siding, bottom – similar to a swimming pool Class 5183 Plumbing and pump installation for small residential ponds Class 6325 Trenching and piping for large ponds





| Other  | General | Specialty |
|--|---------|-----------|
| Household appliance - install, service, repair | 5645    | 9519      |
| Toilets, sinks, etc.                           | 5183    | 5183      |
| Hardware (door knobs, locks, towel bars, etc.) | 5437    | 5437      |
| Smoke or carbon monoxide alarm                 | 5190    | 5190      |
| Shower or bath tub inserts – not glass         | 5102    | 5102      |
| Mirrors  | 5462    | 5462      |

**Class 9519** Household appliances – electrical – installation, service, or repair & drivers applies only to *specialty stores or contractors* that deliver and install.

**Class 5183** Plumbing NOC & drivers – includes placing toilet, sink

**Class 5190** Electrical wiring- within buildings & drivers – includes installation of smoke or carbon monoxide alarms

| Home theater            | General | Specialty |
|-------------------------|---------|-----------|
| Electrical wiring       | 5190    | 5190      |
| Low voltage wiring      | 5190    | 9516      |
| Wood cabinets           | 5437    | 5437      |
| Components and speakers | 5190    | 9516      |

**Class 5190** Electrical wiring - within buildings & drivers – includes installation of all wiring, electronics, components speakers, etc. completed by prime contractor or electrician

**Class 9516** Electric equipment – installation, service, or repair-shop and outside & drivers includes *specialty stores or contractors* that install home electronic equipment. This could include televisions, components, stereo equipment, speakers, etc. This class does not include electrical wiring, only low-voltage or no-voltage wiring.

| HVAC systems                           | General | Specialty |
|--|---------|-----------|
| Heating, ventilation, air conditioning | 5537    | 5537      |

**Class 5537** Air-conditioning, heating and refrigeration systems - installation, service and repair & drivers

- Project code covering the installation of the entire system when the contract has the entire HVAC contract
- Class 5537 does include permanent shop/yard operations.

*Specialty contractors* who have a contract to perform only a part of the HVAC installation are separately rated. However, if they have the entire contract, but subcontract out parts, the parts they complete themselves are classed to 5537.

Specialty contractors having a contract for part of the HVAC install:

**Class 5535** Sheet metal – installation of ductwork

**Class 3724** Installation of furnace or air conditioning unit

Class 5183 Plumbing NOC & drivers

**Class 8601** Air flow testing and balancing of nonportable HVAC systems, as well as energy conservation consulting and audits; does not include any construction activity

| Solar                           | General | Specialty |
|---------------------------------|---------|-----------|
| Solar panel installation        | 3724    | 3724      |
| Solar panel plumbing            | 5183    | 5183      |
| Solar panel electrical wiring   | 5190    | 5190      |
| Solar roofing tile installation | 5551    | 5551      |

**Class 3724** Solar panel installation or repair & drivers – both ground supported and roof mounted

**Class 5551** Solar roofing tile installation or repair & drivers. This is not attached to the roof, but this is the final roof tile.

**Class 5190** Electrical wiring – within buildings & drivers

Class 5183 Plumbing NOC & drivers

| Cleanup                        | General   | Specialty |
|--------------------------------|-----------|-----------|
| Construction cleaning          | See below | 5610      |
| Punch list                     | See below | See below |
| Final cleaning – move-in ready | 5645      | 9014      |

Construction **cleaning** is inclusive in the class assigned to what is being cleaned up. For instance, cleaning up after mortaring a brick wall would be inclusive in class 5022.

If cleanup includes areas where several types of work are being cleaned up, the governing class for the project should be used (class with the most payroll at that job).

Final cleanup, which may involve removing stickers, washing windows, vacuuming, wiping down surfaces, etc., is included in the project **class 5645** if completed by the general contractor's employees, or **class 9014** if completed by a janitorial-type subcontractor.

**Class 5610** applies to businesses that provide cleaners, timekeepers, and watch guards at construction, erection, or wrecking sites. **Punch list work is** *not* **included in class 5610**. Class 5610 also applies to construction risks as long as the payroll for the cleaners, timekeepers, and watch guards *exceeds all* other construction classification payroll (except 5606) at the same job or location.

**A punch list** is a document usually completed at the end of construction listing items a contractor must complete prior to payment. These may include incomplete or incorrect installations, or incidental damage to finishes, material, or structures.

Each punch list activity should be classified according to the type of work needed. For instance, class 5437 repairing wood trim, class 5474 painting, class 5645 general contractor employee fixing drywall or 5445 for the subcontract drywaller completing the repair, class 5215 repair concrete, etc.