Architect’s Plan Review Checklist

REVISED PER 2015 INTERNATIONAL RESIDENTIAL CODE AND LOCAL AMENDMENTS

• 2015 ICC International Residential, Building, Mechanical, Plumbing Codes, as amended
• 2015 Life Safety Code
• 2015 ICC International Fuel Gas Code
• 2014 ICC International Fire Code
• 2014 National Electric Code
• 2013 Food Services Sanitation Code

Address: ___________________________________________________________ Date: ___________________________

Name of Preparer: ___________________________ Phone: ________________ Email: _______________________

Please return checklist and Village marked plans with 2 sets corrected plans; cloud all corrections. In addition to the routine items in our plan review please verify that your plans also show the following:

<table>
<thead>
<tr>
<th>GENERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkway tree removals are typically not allowed for driveway relocations. Pre-review any driveway relocation plans that will be 15 feet or less from any parkway tree or 8-inch diameter or larger in front yard area.</td>
</tr>
<tr>
<td>Provide tree removal plan showing locations of all trees 8-inches or more in diameter proposed for removal on private property.</td>
</tr>
<tr>
<td>Entry columns, entry gates, and fencing require a separate fence permit; 4-foot height limit in front yards.</td>
</tr>
<tr>
<td>The Village’s “Be A Good Neighbor” policy recommends that all those building exterior additions or new homes let their neighbors know about their plans BEFORE construction begins.</td>
</tr>
<tr>
<td>Provide detailed calculations on Village forms showing Floor Area Ratio (F.A.R.) Compliance. Note certain open lattice type structures such as trellis and pergolas are exempt from F.A.R. size limits.</td>
</tr>
<tr>
<td>Provide engineer signed grade plan meeting Village requirements for new houses.</td>
</tr>
<tr>
<td>Provide storm sewer drainage layout site plan for additions and detached structures, pools, etc. Preview any questions in advance with Village Engineer.</td>
</tr>
</tbody>
</table>
All public sidewalks may need to be replaced as part of new house construction. Solid surface apron required for parkway (no gravel). Sidewalk thickness to be replaced with 5-inch of concrete (6 inches at driveway); broom finish only.

| Knox box requirements
| Automatic residential fire sprinkler (new homes only)

Show contractor’s equipment access to the construction area. If over public property, this requires a separate permit and a restoration deposit. Any cracking of public walk or curbs must be replaced, unless contractor can show photos to prove pre-existing condition that has not been damaged further. Access must be at least 15 feet from mature trees. Parking areas are not allowed on street frontage yard areas.

No grade changes are permitted without an engineer-sealed grade plan meeting Village code requirements.

Driveway maximum width is 16 feet, but not wider than the private driveway it leads to.

Note the following on plans if prefab trusses are used for roof - “Engineering calculations and specifications to be submitted prior to framing inspection.”

Window wells exceeding 3 foot-6 inches by 3 foot-6 inches measured horizontally; wood decks, chimneys, balconies, bay/bow windows, etc., to adhere to zoning setbacks (only a 30” overhang for the house is allowed to encroach into required setbacks.

Maximum size of entry landing for 1st floor entry with no roof into required front or side setback is 5 feet wide by 4 feet deep (no roof allowed).

New homes air leakage test required (IECC 402.4)

New homes duct testing is required (IECC 403.3.3)

**THE FOLLOWING IS REQUIRED ON ARCHITECTURAL DRAWINGS:**

- Provide elevation of addition/new house showing setback plane compliance in ¼ inch scale.
- Show garage door width facing street to comply to maximum width requirements (see F.A.R. handout).
- Provide site plan clearly showing all setback distances for buildings, decks, balconies, chimneys, bay windows, air conditioners, generators, trellises, pergolas, playsets, tree houses, and retaining walls.
- Light and vent glazing area not less than 8% fixed & ventilation not less than 4%. (Also see Section R303).
- Roof and floor design live loads required as follows: 30 PSF for roof and 40PSF for floors. Refer to Code for requirements for decks, balconies and stairs (Section R301.5).
- Central air conditioners must adhere to zoning setbacks. A/C units must list tons with over 5 ton units having noise containment.
- Generator locations must adhere to zoning setbacks; units of more than 20kW require submission of a brochure that shows unit size and noise levels.
- For new buildings: show and label drain and water riser diagram.
- Only one kitchen facility is allowed per single family zoned home.
- Include applicable codes as part of drawing.
- Electrical load calculations indicating existing or new service size.
**FOUNDATION PLAN / BASEMENT**

- Metal safety grills that support 200 pounds are required for window wells, except designated basement bedroom egress window wells.

- Concrete foundation and all wood siding must be 6" above finished grade. (Section R404.1.6.)

- Perimeter minimum 42" deep continuous poured concrete foundation is required on all main buildings, including porches, chimneys, bay windows and first floor cantilever areas.

- Detail electrical grounding electrode system (IRC 3608)

- Naturally durable wood or wood that is preservative treated required for contract with concrete. (Section R317)

- Filter fabric covered drain tile required for basements and crawl space, if below grade, as well as dampproofing, and sump pump (if none exists). Drain tile required on the exterior of the footing.

- A 2-inch slush coat of concrete over 6 mil vapor barrier is required for crawl spaces.

- All basement walls and crawl spaces will be insulated (IECC 402). Exterior foam plastic insulation must be flashed and protected per code.

- All furnaces, hot water tanks, sumps, ejector pits and panelboards must be shown and noted.

- All new houses require a minimum of one means of egress from the basement. Any basement rooms that are or could be used as bedrooms, or for spaces next to full bath rough-out locations, require a means of egress. Each egress window requires a minimum 3’x3’ interior dimension window well with ladder. A minimum 36” high steel railing with a hinged gate (measured from grade) at the ladder side, with divider openings spaces less than 4” apart, is required around the perimeter of the window well. Railings/gates with a “ladder” design are not permitted. (Section IRC 310)

**GARAGE**

- Solid core wood door not less than 1¾" thick, or 20-minute fire-rated required door between attached garage and house (Section R302.5.1); equipped with a self-closing device.

- All interior surfaces of attached garages to be protected by not less than ½” drywall. Habitable rooms above garage must be protected by not less than ¾” Type X drywall (Table R302.6).

- Garage heater to be installed a minimum of 6 feet above floor, a sealed combustion chamber wall furnace with car barrier may be used as an alternative (Section G2408.3).

- Plumbing in garage ceiling or exterior walls or house walls adjoining garages to be protected from freezing (890.1320(c) 890.1150 (a) (4)

- Concrete slab (on grade) to be a minimum 3.5 inches thick and have 6"x6" number 10 gauge reinforcing steel mesh. For attached garages a 6-mil vapor barrier is also required. A minimum of 4 inch base is required (Section R506).

- All receptacles to be GFI protected (Section E3901.9)

**DETACHED GARAGE REQUIREMENTS**

- Not less than one receptacle outlet shall be installed for each motor vehicle space.

**BATHROOMS**

- Ventilation fans required for bathroom with no operable window (Section R303.3 & M1507).
Maximum duct length per IRC table 1506.2

Whirlpool tub to be connected to regular receptacles at tub. Branch circuit for tub to be connected to GFI breaker in circuit panel. All metal piping system and all grounded metal parts in contact with circulating water shall be bonded together using 8 AWG solid copper wire (bonding not required for double insulated motor), (Section E4209.4).

Easily opened and visible access to pump motor for servicing required. Minimum access opening is 12 inches by 12 inches and if the motor is located more than 2 feet from the opening then an 18 inch by 18 inch minimum opening is required. Panel openings behind stone are not acceptable (Section P2720.1).

GFI receptacle shall be located within 36 inches of each sink basin on a wall or partition or on the side or face of basin cabinet within 12 inches of counter top (Section E3901.6).

**BEDROOMS**

Entire branch circuit used for bedroom and associated rooms and hallways must be protected by an arc-fault circuit interrupter - noted on plan (Section E3902.11).

Carbon monoxide alarm is required outside of each separate sleeping area. (Section R315.1)

Smoke detector is required in each bedroom and outside each separate sleeping area and each story. (Section R314.3)

One egress window is required for each bedroom or room useable as a bedroom. The window size requirements are as follows: minimum 5.7 sq. ft. clear opening, (minimum 5.0 S.F. at grade floor), minimum 20" width; minimum 24" heights; & maximum 44" sill height above finished floor. The previous dimensions are measured when the window is open. (Section R310.1) The open window cannot obstruct the clear opening. Include a note on the plans noting which window in each room meets this requirement. See “Interior” section for possible special hardware requirement.

**KITCHEN**

Counter tops of 12" or wider must have a GFI receptacle (Section E3901.4).

Counter top receptacles to be GFI protected, marked on plans and following 2-ft spacing rule with maximum 20 inches above counter. Receptacles in appliance garages, cabinets, etc., are not considered readily accessible and will not be considered for meeting the requirement (Section E3091.4.5).

Kitchen island requires a minimum of one GFI receptacle mounted within 12" of top of counter. The counter top may not exceed 6" beyond base of cabinets for this receptacle to be counted - location marked on plans (Section E3901.4.2 & E3901.4.5).

**INTERIOR**

All branch circuits that supply habitable rooms including closets, hallways and similar areas will have arc fault circuit- interrupter protection - see code for exceptions (Section E3902.16).

Habitable room ceiling height to be 7'6" for 50% of room area. Other 50% of room area to be 5 feet to 7'-6".

All surfaces of an enclosed accessible space under staircase to be protected by a minimum of ½” drywall (Section R302.7).

Hallways require minimum 36" clear width (plans marked), ceiling 7'0" clear minimum. Hallways (Section R311.6); Ceiling height (Section R311.6).

Smoke detector required on each story of the dwelling including basement at the staircase (for split levels refer to code requirements); (Section R314).
Wall outlet required on each 2 foot long room wall and 6 foot light cord reachability required for all other room walls (Section E3901.1 & E 3901.2).

Recessed lights for insulated ceilings to be type for direct contact with insulation (Section E4003.5).

Handrail required for 4 or more risers (applies to interior and exterior) (Section R311.7.7).

4-inch sphere cannot pass through window openings where window sills are more than 72 inches above grade and within 24" of floor. Windows designated as egress, require release mechanism be marked with no more than 15 pounds of force to operate. Egress window opening (see Bedroom) must be per code when release mechanism is activated (Section R312). Note on plan which windows must comply to this requirement.

Required dimensions for stairways are as follows: minimum 36" width, minimum 6'-8" headroom; minimum 10" tread with correct size nosing; maximum 7¼" riser, & 34"-38" handrail height measured from nose of tread. Handrails used as guards must have divider openings spaced less than 4” apart. Encroachment into headroom or width is not permitted by gable roofs (Section 311.7).

Interior minimum 36" high guard with divider opening less than 4” required at open-sided walking surfaces, stairs, balconies, landings etc. (Section R311.7.5.1).

Spiral stairs must meet the requirements of code (Section R311.7.10.1).

Major alterations to a house require an existing, non-conforming, stair to be altered to meet the stair requirements for width and headroom.

Door up to former attics or existing 3rd floors to be eliminated if necessary to provide 6 foot 8 inch headroom from each stair tread.

Masonry fireplaces with 6 S. F. opening or larger requires hearth size 20" deep measured from finished face and extending 1 foot on each side of fireplace opening. Provide view and specify 2" air gap to combustibles front face and sides, 4 inches on back side. Fireplace fire stopping at ceilings and floor per code (Section R1001).

Lights required in attic and crawl space. (Section E3903.4)

Location of sub panel-boards must be shown with working space and clearances (cannot be located in clothes closets).

If no A/C or furnace in attic then minimum 22" x 30" access panel required. Drop down stair required when A/C or furnace is located in attic (Section R807.1).

Required access to crawl space as follows: minimum 18" x 24" through the floor; & minimum 16" x 24" through perimeter wall (Section R408.4).

Clothes dryer duct work must be either protected by .062 thick metal shield plate or provide minimum 1½ inches space between duct and finished face of the framing member (Section M1502.5).

ATTICS

Alterations to existing attics or older finished 3rd floors typically require code upgrades for stairways, escape windows in each habitable room, ceiling height compliance, etc.

CROSS SECTION

See foundation plan/ basement for height of finished concrete poured foundation.

Damp-proofing of foundation must be specified (Section R406).
Drain tile with silt sock must be specified. Drain pipe will be placed on a minimum of 2 inches of washed gravel or crushed rock and covered with not less than 6 inches of the same material (Section R405).

Specify insulation materials for crawl space, basement, and if interior or exterior - see Foundation Plan. All above grade insulation for walls and roof must be noted with “R” numbers provided.

Min. 6-mil vapor barrier required under concrete for basement floor, crawl space, and attached garage floors (Section R506.2.3).

Partial or full cathedral ceilings require ventilation between insulation and roof deck. Typical detail would provide full length roof soffit vents, ridge/gable and louvered vents, and air space baffles full length between each rafter to provide for clear natural air convection channels between overhangs and ridge vent (Section R806.3).

Flat roof continuous soffit vents and flat-roof type mushroom roof vents. One-inch minimum air between insulation and roof sheathing is required. Air impermeable insulation such as spray in foam applied to under roof sheathing does not required ventilation (Section R806.4).

Rubber membrane or code approved alternative roof ice protection must be noted on plan (code requires from eave edge to a point 24 inches inside the exterior wall line of the building) (Section R905.2.7.1).

**EXTERIOR**

For wood decks show framing plan and cross section (concrete piers to be 42" deep, 6" above grade with treated wood posts attached to metal brackets and NOT embedded in concrete. All decks 8-inches above grade require railing. See railing heights below. No vapor barrier plastic permitted under deck. All decks having a roof require 42" minimum deep perimeter foundations.

Railing guard heights for decks, landing, balconies, etc. to be 36" high (when over 8" to 30" above grade). Railing heights for balconies, decks, landings, hallways, etc., to be 42" high (when 30" +above grade). Vertical and horizontal dividers must be spaced less than 4" apart. Railings with a “ladder” type design are not permitted. Stranded wire used for dividers has not been shown to comply to code requirements.

Screened porches to follow the guard requirements of decks, balconies but do not require dividers. (Insect screening will not be considered as a guard (Section R312.1).

Downspout drainage must be connected directly to main house storm line (not to drain tile) using SCH 40PVC pipe or other Village approved alternative.

Building underground sewer lines to be SCH-40 or SDR-26 PVC. Footing drain tile to be covered with silt sock.

Address to be attached to the house, positioned 6 feet minimum above grade, visible from street with 6" to 8" tall numbers in a contrasting color.

Minimum waterproof GFI receptacle to be accessible at grade at both the front and back of dwelling (Section E3901.7).

GFI service receptacle must be located within 25 feet of a/c units (Section E3901.11).

Balconies, decks and porches that are accessible from inside of the dwelling unit will have at least one GFI receptacle (Section E3901.7).

Dryvit-type exterior wall coverings are not recommended because of problems experienced with this product on homes previously built.

No furnace or water heater power venting within 10 feet of lot line (Section M1804.2.6).

For areas with topographical grade differences such as ravine or lake front properties exterior guard requirements will be reviewed upon completion of rough grading for walkways, patios, and stairways.
### MULTIPLE FAMILY TOWNHOUSES, COMMERCIAL NEW CONSTRUCTION, ALTERATIONS AND ADDITIONS, VILLAGE OF GLENCOE AMENDMENTS TO IRC AND IBC CODES

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>The exterior walls of all two or more dwelling units, multiple family,</td>
<td>The exterior walls of all two or more dwelling units, multiple family, townhouses, or</td>
</tr>
<tr>
<td>townhouses, or commercial-business buildings must have 4inch thick</td>
<td>commercial-business buildings must have 4inch thick masonry walls, pre-cast concrete, or</td>
</tr>
<tr>
<td>masonry walls, pre-cast concrete, or concrete block wall with a two-hour</td>
<td>concrete block wall with a two-hour fire resistance rating exterior surface finish (stucco)</td>
</tr>
<tr>
<td>fire resistance rating exterior surface finish (stucco). A U.L. rated</td>
<td>A U.L. rated frame or steel stud wall construction does not meet this requirement.</td>
</tr>
<tr>
<td>frame or steel stud wall construction does not meet this requirement.</td>
<td></td>
</tr>
<tr>
<td>The tenant separation walls and floors, party walls and floors, load</td>
<td>The tenant separation walls and floors, party walls and floors, load bearing walls, and</td>
</tr>
<tr>
<td>bearing walls, and common exit walls must all be masonry, pre-cast</td>
<td>common exit walls must all be masonry, pre-cast concrete, or poured-in-place concrete all</td>
</tr>
<tr>
<td>concrete, or poured-in-place concrete all with a fire resistance rating of</td>
<td>with a fire resistance rating of at least two hours. A U. L. rated frame or steel stud wall</td>
</tr>
<tr>
<td>at least two hours. A U. L. rated frame or steel stud wall construction</td>
<td>construction does not meet this requirement.</td>
</tr>
<tr>
<td>does not meet this requirement.</td>
<td></td>
</tr>
<tr>
<td>E.I.F.S. (Exterior Insulation and Finishing System) or so-called “dryvit”</td>
<td>E.I.F.S. (Exterior Insulation and Finishing System) or so-called “dryvit” exterior cladding</td>
</tr>
<tr>
<td>exterior cladding is not permitted in the R-D, B-1, or B-2 Zoning Districts</td>
<td>exterior cladding is not permitted in the R-D, B-1, or B-2 Zoning Districts for new</td>
</tr>
<tr>
<td>for new buildings, additions, or alterations.</td>
<td>buildings, additions, or alterations.</td>
</tr>
<tr>
<td>Dwelling unit bathroom, kitchen, or dryer exhaust work may not penetrate</td>
<td>Dwelling unit bathroom, kitchen, or dryer exhaust work may not penetrate tenant separation</td>
</tr>
<tr>
<td>tenant separation walls or ceilings.</td>
<td>walls or ceilings.</td>
</tr>
</tbody>
</table>

**Please deliver this form with any supporting material to:**

Nathan Parch  
Planning & Development  
Public Works Department  
Village of Glencoe  
675 Village Court  
Glencoe, Illinois 60022

Phone: (847) 835-4111 | Fax: (847) 835-4234 | E-mail: publicworks@villageofglencoe.org  
847-461-1118