IRC PROJECT -- HOW DO I USE PLAN ANALYST?

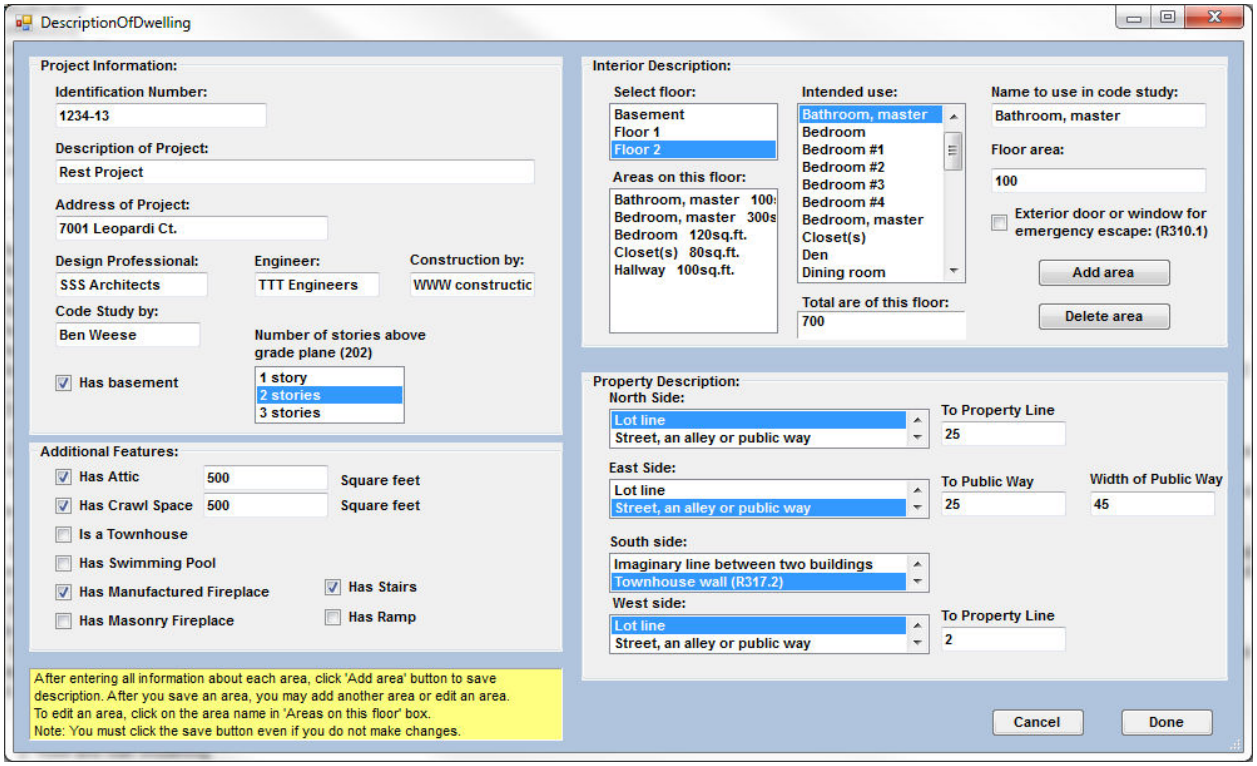
ALL YOU NEED IS A COPY OF THE PLANS AND A COMPUTER WITH PLAN ANALYST INSTALLED. YOU'RE READY TO GO!

- FIRST YOU SIMPLY FILL IN THE PLAN ANALYST FORMS TO COMPLETE THE BUILDING DESCRIPTION AS SHOWN BELOW.
- PLAN ANALYST WILL THEN SEARCH THROUGH THE CODE, COMPLETE ALL REQUIRED TIME CONSUMING CALCULATIONS AND CREATE A CODE STUDY FOR THIS PROJECT THAT ONLY INCLUDES CODE REQUIREMENTS THAT APPLY TO THIS PROJECT.

    1. IF YOU ARE IN THE DESIGN PROCESS, THIS REPORT PROVIDES YOU WITH THE CODE REQUIREMENTS NEEDED TO MAKE YOUR PLAN COMPLY WITH THE CODE INCLUDING INSTANT ANSWERS FOR WHAT IF I ADD OCCUPANCY SEPARATIONS, MOVE THE PROJECT ON THE SITE OR ADD SPRINKLERS, ETC. NOW YOU HAVE COMPLETE CONFIDENCE IN CODE COMPLIANCE, PREVENTING DELAYS WHEN THE PLANS ARE SUBMITTED FOR APPROVAL.
    2. IF YOU ARE CHECKING THE PLANS FOR CODE COMPLIANCE, THIS REPORT PROVIDES YOU WITH THE CODE REQUIREMENTS FOR THIS PROJECT. THIS WILL MAKE THE PLAN REVIEW PROCESS FASTER AND MORE ACCURATE.

- NEXT YOU CREATE A CORRECTION REPORT BY REVIEWING THE QUESTIONS IN THE CORRECTION REPORT SECTION. THE QUESTIONS ARE CUSTOMIZED TO INCLUDE ONLY WHAT IS SPECIFIC TO THIS PROJECT. WHEN YOU HAVE REVIEWED AND ANSWERED THE PROMPTED QUESTIONS A CORRECTION REPORT IS CREATED COMPLETE WITH VERIFYING CODE REFERENCES.
- IF YOU ARE CHECKING PAPER PLANS, YOU CAN ATTACH THIS REPORT TO THE PLANS ELIMINATING CLIENT CODE QUESTIONS.
- IF YOU ARE CHECKING PLANS USING AUTODESK DESIGN REVIEW, YOU CAN SIMPLY CUT AND PASTE THE REQUIRED CORRECTIONS FROM PLAN ANALYST TO THE CALLOUTS BOXES AT THE APPROPRIATE PLACES ON THE PLAN. NO PAPER

ENTERING AN IRC PROJECT DESCRIPTION



PROJECT INFORMATION (upper left corner)

Enter the information about the project.
Click the number of stories and if you have a basement, click the check box.

INTERIOR DESCRIPTION (upper right corner)

Click on the floor that you are entering or editing.

for each area on the floor

1. Click the name of the area in the intended use: list.
2. Enter the floor area. Note: When a number is required, Plan Analyst has a built-in calculator. Ie. 20_6 x 13 for 20'6" times 13'
3. Standard sleeping areas will have a check mark in the box for Exterior door or window for emergency escape: Note: If you select a name from the list (eg. Den or Home office that may also be used for sleeping, be sure to click the box to add the check mark.
4. Click Add area after the information for each area is completed.
5. When all areas on all floors are completed, click the Continue button.

Notes:

1. The total floor area is shown at the bottom of the Interior Description box. Make sure that the total floor area matches the plans. Most floors will have a "Nonhabitable area" to account for walls, shafts, etc.
2. You may move back and forth through the floors and areas by clicking the name of floor or area in the list boxes on the left side. When an area is selected, you may edit or delete it.

ADDITIONAL FEATURES (lower left corner)

Click the check box for each component that is included in this project.

PROPERTY DESCRIPTION (lower right corner)

1. For each side, select the boundary (lot line, street, etc) and enter the required distance(s).
2. Click the Continue button.

The project description is now complete and the code study will be created.
The report will be displayed on the main screen.

EXAMPLE OF THE IRC CODE STUDY CREATED BY PLAN ANALYST

This code study was created using the information that you saw input in this example – notice how simple the input was and how complete the report is!

Ben Weese and Associates
7001 Leopardi Ct.
Naples, FL 34114
(719) 599-5622
Project Description: 1234-13 Rest Project Date: Monday, 4 Feb 2013
Project Location: 7001 Leopardi Ct.
Construction by: WWW construction Architect: SSS Architects Engineer: TTT Engineers
Code Study by: Ben Weese

This code study is based on the 2009 International Residential code by ICC using Building Code software.

The north side has a lot line. Distance to lot line = 25.0 Fire separation distance = 25.0
Wall is not required to have a fire-resistance rating. Projections are not required to have a fire-resistance rating. There is no limit on openings in this wall. (Table R302.1)
The east side has a public way. Distance to public way = 25.0 ,width = 45.0 Fire separation distance = 47.5
Wall is not required to have a fire-resistance rating. Projections are not required to have a fire-resistance rating. There is no limit on openings in this wall. (Table R302.1)
The south side has a fire wall separating townhouses. (R302.2) See wall construction notes below.
The west side has a lot line. Distance to lot line = 2.0 Fire separation distance = 2.0
Wall is required to have a 1-hour fire-resistance rating. Projections are required to have a 1-hour fire-resistance rating on the underside. Openings are not allowed. (Table R302.1)Penetrations are required to be protected using requirements in Section R317.3. (Table R302.1)
TOWNHOUSE SEPARATION:
1. At the common wall, each townhouse must have a 1 hour fire-resistive wall. (Two 1-hour walls) (R302.2)
Exception: A common 1-hour fire-resistance-rated wall is permitted if it does not contain plumbing or mechanical equipment, ducts or vents in the cavity. Penetrations of electrical outlet boxes hall be in accordance with Section R302.4
2. The fire-resistance-rated wall or assembly separating townhouses shall be continuous from the foundation to the underside of the roof sheathing, deck or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed accessory structures. (R302.2.1)
3. Parapets shall be provided as an extension of common walls. (R302.2.2)
Exception: A parapet wall is not required when the roof is covered with a minimum class C roof covering, and the roof deck or sheathing is of noncombustible materials or approved fire-retardant treated wood for a distance of 4 feet on each side of the wall or walls, or one layer of 5/8-inch Type X gypsum board is installed directly beneath the roof decking or sheathing for a distance of 4 feet on each side of the wall or walls.
Parapets shall have the same fire-resistance rating as supporting wall or walls. (R302.2.3)
On any side adjacent to a roof surface, the parapet shall have noncombustible faces for the uppermost 18 inches, to include counterflashing and coping materials.
Where the roof slopes toward a parapet greater than 2 in 12, the parapet shall extend to the same height as any portion of the roof within a distance of 3 feet, but in no case shall the height be less than 30 inches. (R302.2.3)
4. Each individual townhouse shall be structurally independent. (R302.2.4)
Exceptions:
1. Foundations
2. Roof and wall sheathing
3. Nonstructural wall covering
4. Flashing
5. Common 1-hour fire-resistance walls

SITE ADDRESS:
Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Numbers shall be a minimum 4 inches high with a minimum stroke width of 1/2 inch. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. (R319.1)

INTERIOR REQUIREMENTS:
AREAS ON THE 2nd FLOOR
Bathroom, master: Actual floor area = 100, Minimum glazed area = 8 Minimum openable area = 4 (R303.1), Escape/rescue opening = no (R310.1)
Bedroom, master: Actual floor area = 300, Minimum glazed area = 24 Minimum openable area = 12 (R303.1), Escape/rescue opening = yes (R310.1), Smoke alarm required (R314.3)
Bedroom: Actual floor area = 120, Minimum glazed area = 9.6 Minimum openable area = 4.8 (R303.1), Escape/rescue opening = yes (R310.1), Smoke alarm required (R314.3)
Closet(s): Actual floor area = 80, Glazed and openable area not required. (R303.1) See definition of Habitable Space in R202, Escape/rescue opening = no (R310.1)
Hallway: Actual floor area = 100, Glazed and openable area not required. (R303.1) See definition of Habitable Space in R202, Escape/rescue opening = no (R310.1)
2nd FLOOR RESULTS:
Total floor area = 700, Floor finished area = 700, Smoke alarm required in access area outside bedrooms(s) (R314.3)

AREAS ON THE 1st FLOOR
Living room: Actual floor area = 500, Minimum glazed area = 40 Minimum openable area = 20 (R303.1), Escape/rescue opening = no (R310.1)
Kitchen: Actual floor area = 200, Minimum glazed area = 16 Minimum openable area = 8 (R303.1), Escape/rescue opening = no (R310.1)
Garage: Actual floor area = 400, Glazed and openable area not required. (R303.1) See definition of Habitable Space in R202, Escape/rescue opening = no (R310.1)
1st FLOOR RESULTS:
Total floor area = 1100, Floor finished area = 700, Floor garage area = 400, Smoke alarm required on this floor.(R314.3)

AREAS ON THE BASEMENT FLOOR
Unfinished area: Actual floor area = 800, Minimum glazed area = 64 Minimum openable area = 32 (R303.1), Escape/rescue opening = no (R310.1)
BASEMENT FLOOR RESULTS:
Total floor area = 800, Floor unfinished area = 800, Smoke alarm required on this floor.(R314.3)
Basements without bedrooms are required to have at least one emergency escape opening. (R310.1)
TOTALS:
Total area = 2600, Total finished area = 1400, Total unfinished area = 800, Total garage area = 400

CARBON MONOXIDE ALARMS
An approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms when fuel-fired appliances are installed and when dwelling has an attached garage. (R315.1)
GLAZING, MINIMUM SIZE:
Minimum ventilation is 4 percent of the floor area. (R303.1)
Exception 1: Glazed area need not be openable where emergency escape and rescue is not required and an approved mechanical ventilation system is provided capable of producing 0.35 air changes per hour in the room or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cubic feet per minute per occupant computed on the basis of two occupants for the first bedroom and one occupant per each additional bedroom.
Exception 2: The glazed areas need not be provided in rooms where Exception 1 is satisfied and artificial light is provided capable of producing an average illumination of 6 footcandles over the area of the room at a height of 30 inches above the floor.
Exception 3: Use of sunroom additions and patio covers, as defined in Section R202, shall be permitted for natural ventilation if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only be insect screening.
Minimum glazed area is 8 percent of the floor area. (R303.1)
Bathrooms, water closets compartments and other similar rooms shall be provided with aggregate glazing area in windows not less than 3 square feet, one-half of which must be openable. (R303.3)
Exception: The glazed area shall not be required where artificial light and a mechanical ventilation system are provided. Ventilation air shall be exhausted directly to the outside.
ESCAPE/RESCUE OPENING:
Escape/rescue opening must be an operable window or door that opens directly into a public way or to a yard or court that open to a public way. (R310.1)
The minimum clear openable area must meet the following:
1) The maximum sill height is 44 inches. (R310.1)
2) The minimum clear area is 5.7 square feet. (R310.1.1)
Exception: Grade floor windows may be 5.0 square feet.
3) The minimum clear height is 24 inches. (R310.1.2)
4) The minimum clear width is 20 inches. (R310.1.3)
Window wells for escape and rescue windows shall have a minimum net clear area of 9 sq.ft. with a minimum horizontal projection width of 36 inches. (R310.2)
Window wells with a vertical depth greater than 44 inches below grade shall have a ladder or steps. (R310.2.1)
5) If escape/rescue openings are under a deck or porch, a path 36 inches in height must be provided to a yard or court. (R310.5)

MINIMUM ROOM DIMENSIONS:
Habitable rooms, hallways, bathrooms, laundry rooms and basements shall have a ceiling height of not less than 7 feet measured to the lowest projection. (R305.1)
Exception 1: If the ceiling is sloping, then the minimum height is required in only 1/2 of the area.

Exception 2: Bathrooms shall have a minimum ceiling height of 6 feet 8 inches over the fixture and at the front clearance area for fixtures as shown in Figure R307.2. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches above a minimum area 30 inches by 30 inches at the showerhead. Ceilings in basements without habitable spaces may have a ceiling height of 6 feet, 8 inches. (R305.1.1)

Every dwelling unit shall have at least one room which has not less than 120 square feet of floor area. (R304.1)
Other habitable rooms except kitchens shall have an area of not less than 70 square feet. (R304.2)
Habitable rooms other than a kitchen shall not be less than 7 feet in any dimension. (R304.3)

The minimum width of a hallway or exit access shall be not less than 3 feet. (R311.6)

Shower compartments shall have at least 900 square inches of interior cross-sectional area. Shower compartments shall not be less than 30 inches in minimum dimension measured from the finished interior dimension of the shower compartment, exclusive of fixtures valves, shower heads, soap dishes and safety grab bars or rails. Minimum dimensions shall be continued to a height not less than 70 inches above the shower drain outlet. (P2708.1)
SMOKE ALARMS:
1. Smoke alarms are required to be interconnected such that the actuation of one alarm will actuate all the alarms. (R314.5)
2. Smoke detectors are required to be wired to the building's power source. When the primary power is interrupted, they shall receive power from a battery. (R314.4)
EXIT REQUIREMENTS:
At least one egress door shall be provided. (R311.2)
The required exit door shall be a side-hinged door and shall provide a minimum clear width of 32 inches with the door open 90 degrees. The minimum clear height shall not be less than 78 inches. (R311.2)

All egress doors shall be readily openable from the side from which egress is to be made without the use of a key or special knowledge or effort. (R311.4.4)

There shall be a floor or landing on each side of each exterior door. (R311.3)
The width shall not be less that the door served and have a minimum 36 inch dimension in the direction of travel.
Required egress doors:
The floor or landing at the required exit door shall not be more than 1 1/2 inches lower than the top of the threshold. (R311.3.1)
Exception: The exterior landing shall not be more than 7 3/4 inches below the threshold, provided the door does swing over the landing.
Other exterior doors:
Landings shall not be more than 7 3/4 inches below the top of the threshold. (R311.3.2)
Exception: Where a stairway of two or fewer risers is located on exterior side of a door, a landing is not required on the exterior side.

Storm and screen doors shall be permitted to swing over all exterior stairs and landings. (R311.3.3)

STAIR REQUIREMENTS:
A stairway in a dwelling must be at least 36 inches wide at all points above the handrail. The minimum width at and below the handrail height shall not be less than 31.5 inches where a handrail is installed on one side and 27 inches where handrails are provided on both sides. (R311.7.1)
The maximum rise of a step is 7 3/4 inches. (R311.7.4.1)
The minimum tread depth is 10 inches measured between the vertical planes of the foremost projection of adjacent treads. (R311.7.4.2)
Note: A nosing not less than 3/4 inch but not more than 1 1/4 inch shall be provided on stairways with solid risers when the tread depth is less than 11 inches. (R311.7.4.3)
The maximum variation of risers and treads is 3/8 inch within any flight of stairs. (R311.7.4.1 and R311.7.4.2)
The minimum headroom in all parts of the stairway is 6 feet 8 inches measured vertically from the sloped plane adjoining the tread nosing. (R311.7.2)
Enclosed accessible space under stairs shall have walls and soffits protected on the enclosed side with 1/2 inch gypsum board. (R302.7)

All interior and exterior stairs shall be provided with a means to illuminate the stair, including landings and treads. (R303.6)

The control for activation of required interior stairway lighting shall be accessible at the top and bottom of each stair without traversing any step of the stair. The control for exterior stairs shall be controlled from inside of the dwelling unless illumination is continuous or automatic. (R303.6.1)

HANDRAILS:
Provide a handrail on one at least one side of a stairway if there is 4 or more risers. (R311.7.7)
Handrails shall be between 34 inches and 38 inches measured vertically from the sloped plane adjoining the tread nosing. (R311.7.7.1)
The handrails are required to extend the full length of the stairs. Ends shall be returned or terminate in newel post or safety terminals. (R311.7.7.2)
Handrails shall be one of the following types or provide equivalent graspability. (R311.7.7.3)
Type I. Handrails with a circular cross section shall have an outside diameter of 1 1/4 inches to 2 inches. If the handrail is not circular, it shall have a perimeter dimension of not less than 4 inches and not greater than 6 1/4 inches with a maximum cross section dimension of 2 1/4 inches.
Type II. Handrails with a perimeter greater than 6 1/4 inches shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch measured vertically form the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth shall continue for at least 3/8 inch to a level that is not less than 1 3/4 inches below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches to a maximum of 2 3/4 inches. Edges shall have a minimum radius of 0.01 inches.

GUARDS:
Guards shall be provided when the floor or grade below is more than 30 inches. (R312.1)
The minimum height is 36 inches. Open sides of stairs shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. (R312.2)
Openings in a guardrail must be such that it will not allow the passage of a sphere 4 inches or more in diameter. (R312.3)
Exception 1: The triangular openings formed by the riser, tread, and bottom rail may be such that a sphere 6 inches cannot pass through.
Exception 2: Openings for required guards on the sides of stair treads shall not allow a sphere 4 3/8 inches to pass through.
GLAZING, SAFETY:
1. All glazing in hazardous locations is required to be of safety glazing material. (R308.3 & R308.4)
2. Note windows and doors in a tub or shower area are required to be safety glazed when the bottom edge is less than 60 inches above any standing or walking surface. (R308.4 #5)
INSULATION REQUIREMENTS:
1. Insulation including facings installed within floor-ceiling assemblies, roof-ceiling assemblies, wall assemblies, crawl spaces and attics shall have a flame spread rating of 25 or less and a smoke developed rating of 450 or less. (R302.10.1)
Exception: Facings are not required to have a flame spread and smoke-developed rating if it is in a concealed space and the facing is in contact with a wall or ceiling.
2. Foam plastics, except where approved in R316.5 or R316.6, shall be separated from the interior of the building by a minimum 1/2 inch gypsum wallboard. (R316.4)
See section R316 for additional limits on the use of foam plastics.
FACTORY-BUILT FIREPLACE:
1. Unit must be an approved unit. (R1004.1)
2. Clearances must be per manufacture's approval. (R1004.1)
3. Hearth size must be per manufacture's approval. (R1004.2)
4. Chimney height must be per manufacturer's approval. (R1005.1)
SEPARATION OF AN ATTACHED GARAGE:
1. The garage shall be completely separated from the residence and its attic area by 1/2-inch gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch Type X gypsum board. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 1/2-inch gypsum board. (Table R302.6)
2. Doors between the garage and the residence are to be solid wood not less than 1 3/8 inches thick, a 20-minute fire-rated door or a solid or honeycomb core steel door not less than 1 3/8 inches thick.(R302.5.1)
Openings from the garage to a room used for sleeping purposes are not permitted.
3. Floor surfaces shall be of approved noncombustible material. Floors shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway. (R309.1)

ATTIC REQUIREMENTS:
1. Provide an access to all attic areas greater than 30 square feet with a clear height of 30 inches or more. The minimum size is 22 inches by 30 inches. A 30 inch unobstructed headroom is required above the access. (R807.1)
Attics containing mechanical appliances shall provide an opening large enough to allow removal of the appliance but not less than 30 inches high and 22 inches wide and not more than 20 feet from the appliance. (M1305.1.3)
2. Provide ventilation in all attic areas. The net free ventilating area is to be not less than 1 square foot for each 150 square feet of attic area. The vent area may be 1/300 if at least 50% but not more than 80% of the required ventilating area is provided by ventilators located in the upper portion of the attic. The upper ventilators must be at least 3 feet above the eave or cornice vents. (R806.2)
As an alternative, the net free cross-ventilation area may be not less than 1 to 300 of the attic when a Class I or Class II vapor barrier is installed on the warm-in-winter side of the ceiling. (R806.2)
For a 500.0 sq.ft. attic area:
Using a ratio of 1/150, total vent area must be at least 3.33 sqft
Using a ratio of 1/300, total vent area must be at least 1.67 sqft

CRAWL SPACE REQUIREMENTS:
1. Access shall be provided to all under-floor spaces. Access openings through the floor shall be a minimum of 18 inches by 24 inches. Openings through a perimeter wall shall be 16 inches by 24 inches. When any portion of a perimeter wall access is below grade, an areaway if not less than 16 inches by 24 inches shall be provided. (R408.4)
Crawl spaces containing mechanical appliances shall provide an opening large enough to allow removal of the appliance but not less than 30 inches high and 22 inches wide and not more than 20 feet from the appliance. (M1305.1.4)
2. The finish grade of under-floor surface may be located at the bottom of the footings; however, where there is evidence that the groundwater table can rise to within 6 inches of the finished floor, or where the surface water does not readily drain, the grade in the under-floor space shall be as high as the outside finished grade, unless an approved drainage system is provided. (R408.6)
3. Provide ventilation either by mechanical means or by openings in exterior walls. Opening shall provide a net area of not less than 1 square foot for each 150 square feet of area in crawlspace. One such ventilating opening is required to be within 3 feet of each corner. (R408.2)
Ventilation openings in under-floor spaces shall not be required where: (R408.3)
1. Exposed earth is covered with a continuous Class I vapor retarder; and
2. One of the following is provided for the under-floor space:
2.1 A continuously operated mechanical exhaust ventilation system is provided at a rate equal to 1 cfm for each 50 square feet and perimeter walls are insulated.
2.2 Conditioned air supply sized to deliver at a rate equal to 1 cfm for each 50 square feet and perimeter walls are insulated.
2.3 Plenum complying with section M1601.5 , if under-floor space is used as a plenum.
For a 500 sq.ft. crawlspace area:
Using a ratio of 1/150, total vent area must be at least 3.33 sqft
Using a ratio of 1/1500, total vent area must be at least 0.33 sqft

FIREBLOCKING:
Fireblocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space. (R302.11)
1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs as follows:
1.1 Vertically at the ceiling and floor levels.
1.2 Horizontally at intervals not exceeding 10 feet.
2. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, cove ceilings, etc.
3. In concealed spaces between stair stringers at the top and bottom of the run
4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion.
5. All spaces between chimneys and floors and ceilings shall be fireblocked with noncombustible material. (R1003.19)
AUTOMATIC FIRE SPRINKLER SYSTEM
An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings. (R313.2)
System shall be designed and installed per P2904 or NFPA 13D. (R313.2.1)
HEATING REQUIREMENTS:
1. Every dwelling unit shall be provided with heating facilities capable of maintaining a room temperature of 68 degrees F at a point 3 feet above the floor and 2 feet from exterior walls in all habitable rooms. (R303.8)
2. A level working space 30 inches deep and 30 inches wide shall be provided in front of the control side. (M1305.1)

3. Central furnaces within compartments or alcoves shall have a minimum working space clearance of 3 inches along sides, back and top with a total width of the enclosing spaces being at least 12 inches wider than the furnace. (M1305.1.1)
4. Heating and cooling appliances located in a garage shall be protected from impact by automobiles. (M1307.3.1)
5. Appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches above the floor level. (M1307.3)
6. Fuel-fired water heaters shall not be installed in a room used as a storage closet.
7. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure such that combustion air will not be taken from the living space. (M2005.2)
Exception: Direct vent-type water heaters.

CLOTHES DRYER EXHAUST:

Dryer exhaust duct for closer dryers shall terminate on the outside of the buidling and shall be equiped with a backdraff damper. Screens shall not be installed at the duct termination. Ducts shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the flow. Clothes dryers exhaust ducts shall not be connected to a vent connector, vent or chimney. Clothes dryer exhaust ducts shall not extend into or through ducts or plenums. (G2439.3)

Must meet one of the following

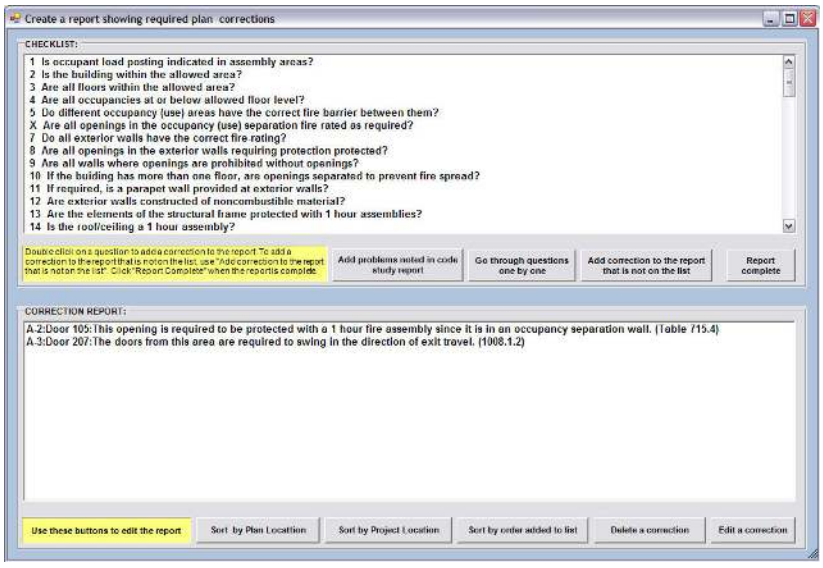
1. The maximum length of a clothes dryer exhaust vent shall not exceed 25 feet from the dryer to the wall or roof termination. A reduction in maximum length of 2.5 feet for each 45-degree bend and 5 feet for each 90-degree bend shall apply. (M1502..4.4.1)
2. The size and maximum length shall be determined by the manufactures installation instructions. (M1502.4.4.2) Where the exhaust duct is concealed within the building construction, the equivalent length shall be identified on a permanent label or tag. (M1502.4.5)

RECEPTACLE OUTLETS:

1. Outlets shall be installed so that no point along the floor line in any wall space is more than 6 feet from an outlet including any wall space 2 feet or more in width. (E3901.2.1 and E3901.2.2)
Wall space includes fixed panels, fixed room divides such as railings and free standing bar-type counters.
2. Walls above counter space are required to have an outlet when the counter is 12 inches or greater in width. They shall be installed so that no point along the wall is more than 24 inches from a receptacle. (E3901.4.1)
Exception: Receptacle outlets shall not be required on a wall directly behind a range or sink.
3. At least one wall receptacle outlet shall be installed in bathrooms within 36 inches of the outside edge of each lavatory basin. (E3901.6)
4. At least one receptacle outlet shall be installed outdoors at the front and back of each dwelling unit having direct access to grade. (E3901.7)
5. At least one receptacle outlet shall be installed in each basement and in each garage. (E3901.9)
6. Hallways of 10 feet or more in length shall have at least one receptacle outlet. (E3901.10)
7. All interior and exterior stairways shall be provide with a means to illuminate the stairs, including the landings and treads. (R303.6) Where an interior stairway has 6 or more risers, there shall be a wall switch at each floor level. (R303.6.1)

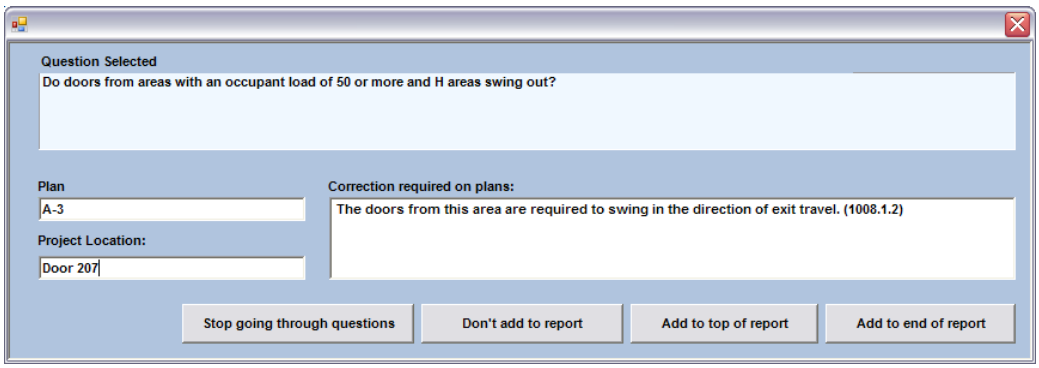
CORRECTION REPORT

PLAN ANALYST CREATES A CHECKLIST FOR THIS PROJECT. THE QUESTIONS IN THE CHECKLIST ARE SELECTED BASED ON THE CODE STUDY SO YOU WILL NOT BE ASKED QUESTIONS THAT DO NOT APPLY TO THIS PROJECT.



YOU MAY EITHER SCROLL THROUGH THE LIST AND PICK QUESTIONS BASED ON YOUR REVIEW OF THE PLANS OR CLICK THE GO THROUGH QUESTIONS ONE BY ONE BUTTON AND PLAN ANALYST WILL LEAD YOU THROUGH EACH QUESTION ON THE CUSTOMIZED LIST.

When you note a problem on the plans, the following screen is displayed. You enter the problem on the plans and identify the project location.



When you have completed the list of questions, click the Report complete button. This will create the correction report. To review the correction report, click the Required Corrections tab on the main screen to review the report.

Example of an IRC Correction Report

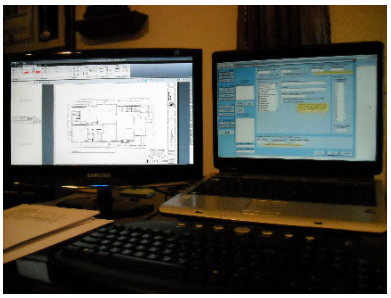
This correction report was created using the information that you saw input in this example – notice how simple the input was and how complete the report is!

Ben Weese and Associates
7001 Leopardi Ct.
Naples, FL 34114
(719) 599-5622
Project Description: 1234-09 Test project Date: Thursday, 18 Jun 2009
Project Location: 7001 Leopardi Ct.
Construction by: www Construction Architect: sss Architects Engineeer: ttt Engineers
Code Study by: Ben Weese

The corrections listed below are required for the plans to comply with the 2009 International Residential Code (IRC) by ICC.

1 A-4 : West Wall : This exterior wall is required to be a 1 hour fire resistive from both sides. (R302.1 and Table R302.1)
2 A-3 : Top of basement stairs : Ramps require landings (3-foot by 3-foot minimum) at top, bottom and at change in directions. (R311.8.2)
3 A-2 : Bedroom, master : The area of glazed openings in this room is less than 8 percent of the floor area. (R303.1)
4 A-4 : 2nd floor hall : An approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms when fuel-fired appliances are installed and when dwelling has an attached garage. (R315.1)

ALL DIGITAL (PAPERLESS) CODE STUDIES



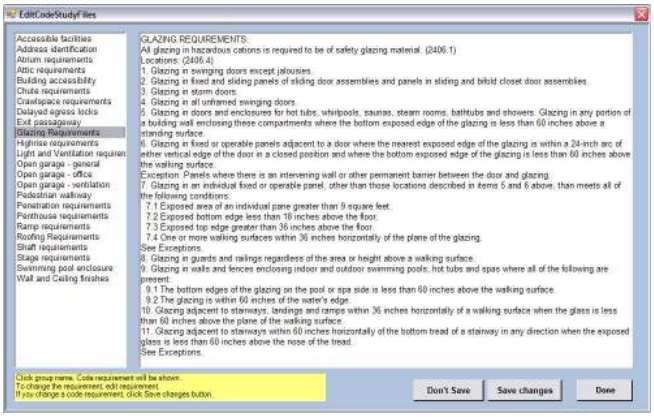
What is needed?

1. Computer with 2 monitors connected (1 to display Plan Analyst and 1 to display AutoDesk) or 1 large screen that displays both Plan Analyst and AutoDesk Design Review.
2. Plan Analyst software
3. AutoDesk Design Review software (Currently, free of charge from AutoDesk)

Use the features of AutoDesk Design Review to get information (dimensions, Square feet, etc). Enter the information into Plan Analyst. As you create the correction report, copy and paste required corrections from Plan Analyst to the callout boxes in AutoDesk Design review. Using this system, you have reviewed the plans without handling a paper copy of the plans.
This system speeds up the plan check process, adds convenience and a popular **GREEN FACTOR** feature.

Adjusting Plan Analyst for local requirements

EDIT CODE STUDY REQUIREMENTS

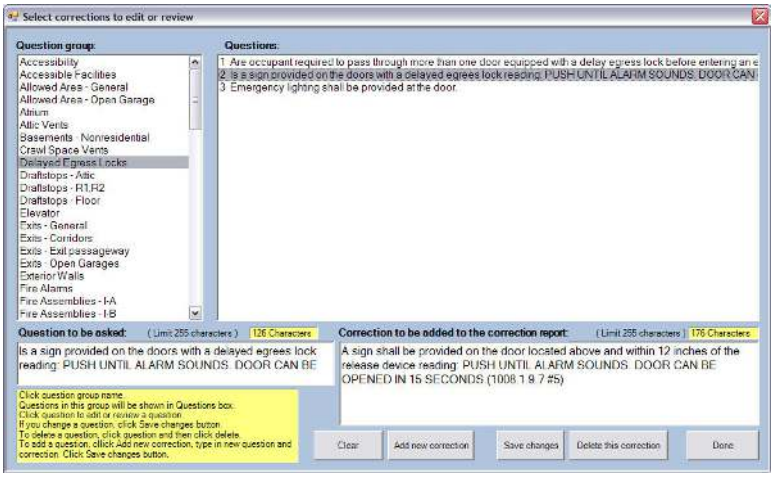


This allows you to review or change code requirements for code studies.
You can change wording to match local requirements or your preferred wording.

Click **requirement name** in left box.
Corresponding code requirements will be shown in the right box. You may edit the requirement before saving.
Click the **Save changes** button after editing each requirement.
Click another requirement **name** or Click the **Done** button.

EDIT QUESTIONS FOR CORRECTION REPORT

You can add, modify or delete questions asked during the creation of each new correction report. This allows you to adjust questions to show local conditions or preferences.



To edit a question

1. Select Question group.
2. Select Question.
3. Edit question/correction in boxes at bottom of screen.
4. Save changes

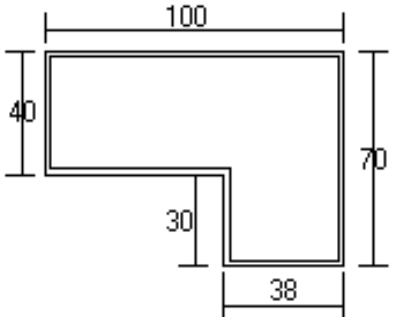
To Add a question

1. Type in new question and correction.
2. Click Add Correction button.

Special calculator feature

USING THE CALCULATOR

When numbers, such as dimensions and square footage, are required, a four-function calculator is built into plan analyst. use the + for addition - for subtraction x or * for multiplication and / for division. Algebraic logic is used (i.e. division and multiplication are always done before addition and subtraction)



There is no need to reach for your calculator.
When asked for the floor area enter: 100 x 40 + 30 x 38 and the floor area will be calculated for you.

ENTERING DIMENSIONS

Dimensions may be entered using either decimals of a foot (10.4167) or by using the Feet_inches (10_5) format. For 10 feet 5 inches, you enter either 10.4167 or 10_5.