Alamosa County Department of Building Safety
Checklist for RESIDENTIAL CONSTRUCTION

Project Address: _____ Date:_____

Property Owner Name: _____

Applicant Name and Role:_____

THIS CHECKLIST MUST BE COMPLETED & SUBMITTED WHEN FILING A PERMIT APPLICATION.

☐ **1. Application form**
Completed application form listing contractor details and project description

☐ **2. Proof of Ownership (if not current owner of record on Assessor Map)**
Deed or notarized development authorization from owner of record

☐ **3. One set of complete Construction Drawings**
(Stamped plans from a Colorado licensed design professional are required for timber frame, structural steel, alternative construction, and sidewalls over 11'7" in height)
Must be legible and to scale and 11"x17" minimum size

- ☐ **Foundation Plan:** Footing layout, wall layout/detail, pad/pier layout/details. Show size and reinforcing and foundation hold down
- ☐ **Floor Plan:** Dimensioned plan for each floor that includes room sizes and uses
- ☐ **Floor Framing Plan:** Include column sizes and locations, joist sizes and spacing, manufacturer and series, all beam/header sizes, framing around floor openings and stairways, and hanger specs. Include similar details for deck framing.
- ☐ **Wall Framing Plan:** Stud size and spacing, all header sizes lengths and support framing, wall bracing elements, and exterior shear. *See IRC R602*
- ☐ **Roof Framing Plan:** Rafter size and spacing, ceiling joist size and spacing, ridge beam size, supporting beams and hanger details. Trusses must be engineered, and layout and plans provided with application. Stamped truss plans must be onsite at framing inspection.
- ☐ **Elevations:** Drawn to scale views of each side, show final grade
- ☐ **Details and Tables:** Provide drawings or tables to illustrate the following:
  - Section view drawing of footing and foundation wall with reinforcing size and placement, insulation location and R-value, and depth from final grade to bottom of footing.
  - Anchor bolt sizing and spacing
  - Wall stud sizing and spacing
  - Crawlspace wall and attic insulation
  - Wall section drawing showing exterior finish & sheating, insulation materials and R-Values, interior finishes
  - Thermal envelope – show both elevation/side view AND overhead/floorplan view
  - Barriers- indicate location and materials for water resistive barrier, air barriers, and vapor barriers
  - Flashing details per IRC R703.4, including Window Flashing details
- ☐ **Window & Door Schedules:** Manufacturer details including U-factor
- ☐ **Energy Code Compliance**: Complete checklist for IECC compliance
  - Include ResCheck or other documentation if appropriate

Continued on next page

☐ **4. Site plan (Must be legible)**
- ☐ Site orientation (North arrow)
- ☐ Show and label roads and streets and Location of the driveway
- ☐ Parcel Number or Address
- ☐ Location, shape and size of proposed construction
- ☐ Show the dimensions from proposed construction to property boundaries.
- ☐ Location and size of existing structures and the distance between them
- ☐ Show the utility service location (gas, water, and electrical) **CALL 811 for locates**
- ☐ Show the location of the wells and septic systems

☐ **5. Engineered Truss Drawings**

Truss Layout and complete set of drawings provided with plans
See Alamosa County Design Criteria for snow and wind loads
Stamped truss plans must be on site at Framing Inspection

☐ **6. Proof of Adequate Water Supply (CHECK ONE)**
- ☐ Well Permit from (DWR) No. _____
- ☐ Approval letter from East Alamosa Water and Sanitation (EAWS)

☐ **7. Proof of Sanitary Sewer**
- ☐ Existing OWTS **(Note that additions require evaluation inspection and probable upgrade)**
- ☐ New/Repair OWTS Permit #:_____
- ☐ East Alamosa Water & Sanitation District
- ☐ Mosca Wastewater account

☐ **8. Copy of Home Owners Association Approval**

HOA Letter of Approval

ITEMS BELOW TO BE COMPLETED BY DEPARTMENT STAFF

☐ **12. Access/Address**
- ☐ Existing County Driveway with Address
- ☐ New Address Application for vacant land Permit #: _____
- ☐ CDOT Access Permit

☐ **N/A** **13. Elevation Certificate**
- ☐ Zone: A☐ AE☐ AO☐ A99☐ V☐ VE☐ X☐ D☐
- ☐ Panel No. 080009 0045 B
- ☐ Small Farms Sub-division Sec. 25 & 25 T. 38 N., R. 9 E.
- ☐ Sierra Blanca Estates Sec. 21 T. 37 N., R. 10 E.
- ☐ Sec. 19, 20, 21, 28, 29, 30 T. 37 N., R. 10 E.
- ☐ North Zapata Creek & South Zapata Creek

14. Zoning District: RU☐ RE☐ RL☐ RM☐ RH☐ RMH☐ C☐ I☐

15. Setbacks Required: Front (___') R-Side (___') L-Side (___') Rear (___')
Ht. (___') Percent Coverage of Lot Allowed _____%

16. Staff Member Accepting Application: (Initials) _____Date_____
- ☐ Application Complete

17. P & Z Staff Approval By: _____Date_____

SLV Submittal Documents for 2018

Residential IECC Compliance Paths

Xcel Energy's Building Codes Support Program

Construction Documents Required for Every Submittal Regardless of Compliance Path

1. Insulation materials and their R-values
2. Fenestration U-factors and SHGC
3. Area-weighted U-factors and SHGC calculations (If applicable)
4. Air sealing details to verify compliance with Table R402.4.1.1
5. Building thermal envelope depicted
6. Flashing detail as required by the IRC 703.4 and IBC 1404.4
7. Window flashing details
8. Mechanical and service water heating system and equipment types, sized and efficiencies
9. Equipment and system controls
10. Duct sealing, duct and pipe insulation, and location
11. Mechanical system design criteria *(Begins in Phase 2)*
12. Provide an ACCA Manual J or other approved calculations for heating and/or cooling loads *(Begins in Phase 2)*
13. Provide an ACCA Manual S for equipment sizing *(Begins in Phase 2)*
14. Provide an ACCA Manual D for duct design *(Begins in Phase 2)*
15. Documentation for mechanical ventilation, type of ventilation, CFM, and efficiency. *(Begins in Phase 2)*

SLV Submittal Documents for 2018

Residential IECC Compliance Paths

Xcel Energy's Building Codes Support Program

Residential - Prescriptive

R-value Alternative

1. Provide R-value of insulation in the thermal envelope that shows compliance with Table R402.1.2.
2. Provide U-factor of fenestration in the thermal envelope that shows compliance with Table R402.1.2
3. Documentation for energy conservation measures for service water heating. *(Begins in Phase 2)*
4. Documentation that shows 90% of all lighting is high efficacy.

U -factor Alternative

1. Documentation of the wall, floor, ceiling/roof assemblies U-Factor values by component and as an assembly demonstrating the assembly that represents the thermal envelope meets the requirements of the U-Factor Table R402.1.4 in Chapter 4.
2. Documentation for energy conservation measures for service water heating. *(Begins in Phase 2)*
3. Documentation that shows 90% of all lighting is high efficacy.

Total UA Alternative (REScheck)

1. Provide an area-weighted U-Factor report; The thermal envelope must show the location of insulation. The wall assembly that represents the thermal envelope must meet the requirements of the U-Factor table shown in Chapter 4. The UA calculation must be performed using a method consistent with ASHRAE.
2. Documentation for energy conservation measures for service water heating *(Begins in Phase 2)*
3. Documentation that shows 90% of all lighting is high efficacy.

EXHIBIT A

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD°	WIND DESIGN				SEISMIC DESIGN CATEGORY[f]	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP[e]	ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARDS[g]	AIR FREEZING INDEX[i]	MEAN ANNUAL TEMP[j]
	Speed[d] (mph)	Topographic effects[k]	Special wind region[l]	Windborne debris zone[m]		Weathering[a]	Frost line depth[b]	Termite[c]					
30 Except 40 over 7880 ft elevation	115	NO	NO	NO	C	Severe	36" from final grade	Moderate - Heavy	-16° F	YES	1999 FIRM	3000	43° F

MANUAL J DESIGN CRITERIA

Elevation	Latitude	Winter heating	Summer cooling	Altitude correction factor	Indoor design temperature	Design temperature cooling	Heating temperature difference
7800' – 9200'	37°N	-8° F	84° F	7800'=0.76 9000'=0.72	70° F	75° F	78° F
Cooling temperature difference	Wind velocity heating	Wind velocity cooling	Coincident wet bulb	Dally range	Winter humidity	Summer humidity	-
9° F	15 MPH	7.5 MPH	59°	H	30%	50%	-

For SI: 1 pound per square foot= 0.0479 kPa, 1 mile per hour= 0.447 mis.

a. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index, "negligible," "moderate" or "severe" for concrete as determined from Figure R301.2(4). The grade of masonry units shall be determined from ASTM C34, CSS, C62, C73, C90, C129, Cl45, C216 or C652.

b. Where the frost line depth requires deeper footings than indicated in Figure R403.l(l), the frost line depth strength required for weathering shall govern. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.

c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.

d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(5)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

e. The outdoor design dry-bulb temperature shall be selected from the columns of $97^1/_2$-percent values for winter from Appendix D of the *International Plumbing Code*. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official. [Also see Figure R301.2(1).]

f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.l.

g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of the currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.

h. In accordance with Sections R905.l.2, R905.4.3. l, R905.5.3.1, R905.6.3. l, R905.7.3. l and R905.8.3. l, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."

k. In accordance with Section R301.2. l.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

l. In accordance with Figure R301.2(5)A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

m. In accordance with Section R301.2.1.2 the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b from ACCA Manual J or established criteria determined by the jurisdiction.

o. The jurisdiction shall fill in this section of the table using the Ground Snow Loads in Figure R301.2(6)