
RESIDENTIAL NEW HOME CONSTRUCTION

- Each address requires a separate permit.
- All materials and the installation of all materials must comply with the Minnesota State Building Code and the manufacturers' installation specifications for each product.

SUBMISSION CHECKLIST

ADDRESS _____

(Incomplete applications **will not** be forwarded to the Building Inspections Department for plan review.)

- Surveys.** New homes constructed in Mound are required to have three separate surveys completed during the construction process. Three (3) copies of the initial survey are required to be submitted with the building permit application. See "**Survey Requirements.**"
- Plans.**
 - 3 sets of structural building plans (floor plans and elevations)
 - 2 sets of plans indicating braced wall lines for each floor
 - Braced wall line worksheet (attached)
 - Roof/floor truss plan/layout
 - New Construction Energy Code Compliance Certificate (attached)
 - Worksheet E-1 ("Residential Combustion Air Calculation Method" – attached)
 - Table 501.3.1 form ("Procedure to Determine Makeup Air Quantity for Exhaust Equipment" – attached)
 - Additional information may be required by the plans examiner.
- Contact the Minnehaha Creek Watershed District (952-471-0590) related to regulations and applicable permits. **The building permit will not be released until the City is provided a copy of the MCWD permit(s) and/or confirmation from the MCWD that no permit is needed.**
- Completed and signed Building Permit Application (including Submission and Feature Checklists)**
- Demolition Permit Application (if applicable) – see separate packet**
- Hardcover Calculation Worksheet**
- Building Height Certification worksheet AND drawing.** The applicant (or representative) must verify, on the form provided, that the proposed height of the new structure meets the height regulations of 2 ½ stories or 35 feet based on the Zoning Ordinance definition. Please provide the average grade (building line) calculation and the measurement to the appropriate location based on the roof type per City Code. Applicant is advised that the definition of "Building Height" is included on the General Zoning sheet for the particular zoning district of the parcel.
- Property Owner as Applicant Form - If applicable.**
- Additional Information.** A soil test may be required at the discretion of the Building Official. Engineered paver design specs will be required if pavers are used.

HOME FEATURE CHECKLIST

PLEASE CHECK ALL ITEMS THAT WILL BE INCLUDED IN THE CONSTRUCTION OF THIS HOME.

All items checked below may need to be installed and completed before a Certificate of Occupancy can be issued for this new home. If any of the items below are added to the plan after the building permit has been issued, an additional permit will be required.

- Finished Basement
- Deck
- 3-Season Porch
- Gas Fireplace Quantity _____
- Masonry/Wood Fireplace Quantity _____
- In-Floor Heat – Wirsbo
- Geothermal System
- Other: _____
- Retaining Wall - maximum height = _____
(retaining walls are measured from the bottom of the foundation to the top of the block (wall))

FOUNDATION INFORMATION

Typical Footing Size	x			
Foundation Type	Masonry <input type="checkbox"/>	Poured Wall <input type="checkbox"/>	ICF <input type="checkbox"/>	Wood <input type="checkbox"/>
Foundation Thickness	8-inch <input type="checkbox"/>	10-inch <input type="checkbox"/>	12-inch <input type="checkbox"/>	Other <input type="checkbox"/>
ICF Only	5.5-inch <input type="checkbox"/>	7.5-inch <input type="checkbox"/>	9.5-inch <input type="checkbox"/>	Other <input type="checkbox"/>
Design Criteria	Conventional <input type="checkbox"/>	Engineered <input type="checkbox"/>	IRC Tables <input type="checkbox"/>	

Maximum Foundation Wall Height: 4' 5' 6' 7' 8' 9' 10' Other _____

Vertical Reinforcement Size and Spacing _____ rebar _____ inches o.c.

Waterproofing/Damp-proofing (product type) Above grade: _____ Below grade: _____

Foundation Drainage System Type _____

Applicant's Signature

Date

SURVEYS. New homes constructed in Mound are required to have three surveys completed during the construction process. See attached "Survey Requirements" for specific items to be included on each survey.

INITIAL SURVEY: This survey shall be titled "Certificate of Survey." Three (3) copies of the initial survey are required to be submitted with the building permit application.

FOUNDATION SURVEY: This survey shall be titled "Foundation Survey" and shall certify the location and elevations of the installed foundation. This information will ensure that the structure was built where proposed. Two (2) copies of the foundation survey must be provided to the City of Mound Planning and Inspections Department and approved by staff prior to the backfill inspection.

AS-BUILT SURVEY: This survey shall be titled "As-built Survey" and shall certify the final grading and resulting drainage. **This information is required to be reviewed and approved by the City Engineer before a Certificate of Occupancy (CO) will be issued.** Two (2) copies of the as-built survey shall be provided to City. Keep the following in mind:

- A minimum of seven (7) days are needed to complete the as-built survey review.
- A PDF file of the as-built survey may be accepted for review prior to the submittal of the required certified copies. Such a submittal will eliminate the time delay inherent in delivering the survey to the City Offices. Issuance of a permanent CO is still conditional upon submittal of the required certified copies to the city.
- A letter of submittal/cover letter is to be sent with each survey sent.
- Builders are advised to schedule closing to accommodate time needed for potential grading corrections. Temporary C.O.'s will not be granted solely to accommodate a scheduled closing.

PERMITS. Plumbing, mechanical, and electrical permits are issued separately. Licensed contractors are required for new home construction and non-owner occupied housing.

FEES. This is a partial listing of expected fees. The park dedication fee, utility trunk charges, street assessments or other charges may be applicable.

Building Permit	Based on current fee schedule adopted by Council
Plan Review	65% of the base fee
State Surcharge	.0005 x building valuation
Sewer Connection	\$240 per unit for new sewer service
Water Connection	\$240 per unit for new water service
Water Meter	\$392 (2 meters – 1 deduct, 1 regular) see comments below
Sewer Availability Charge (SAC)	Current charge at the time permit is issued (\$2,485 in 2016)
SAC charge is per housing unit. Funds are transferred to the Metropolitan Waste Control Commission.	
Erosion Control Escrow	\$1,000
Project Management Escrow	\$5,000
Pre-Construction Site Inspection	\$100
Water & Sewer Trunk Charges	\$2,000 water, \$2000 sewer per dwelling unit (if applicable)
Park Dedication	\$1,100 per dwelling unit (if applicable)

WATER METERS. The City now requires new home contractors/homeowners to purchase an extra meter from the City of Mound that would be used for metering water used outside for lawn and garden watering. The City ordinance states that "the sewer rates shall be based on the actual water used. Water used, but not placed into the sanitary sewer, may be deducted provided it is metered." Sprinkler meters must be obtained from the City and new home customers are charged for 2 meters on the building permit. Customers are also responsible for installation of both according to the approved installation guidelines.

**IT WILL TAKE APPROXIMATELY 15 BUSINESS DAYS TO PROCESS A COMPLETE APPLICATION.
IF ALL REQUIRED ITEMS ARE NOT SUBMITTED, REVIEW WILL TAKE LONGER.**

PERMIT CARD AND APPROVED PLANS (throughout the project) shall be:

POSTED prior to start of work - **VISIBLE** from street or driveway - **ACCESSIBLE** to the inspector

INSPECTION REQUIREMENTS:

- **MUST** schedule during office hours **AT LEAST** one business day prior to required inspection. If a specific date and/or time will be required, more notice may be needed – please plan ahead. A re-inspection fee may be charged for failure to cancel an inspection for which you are not ready, or for failure to pass an inspection.
- Office Hours: Monday - Friday • 8:00 a.m. - 4:30 p.m.
- Phone: (952) 442-7520 or (888) 446-1801
- **Permit card and approved plans MUST be on site for each inspection and should be protected from the weather.**
- Post address on construction site and visible from the street.

Inspections: See your permit card to determine which of the following inspections are required for your project. The card and plans must be on site for EVERY inspection!

- **Site inspection (prior to excavation):** Refer to Site Inspection Checklist that will come back with your approved plans – all items on the checklist must be complete prior to the inspection. The Site Inspection Checklist **MUST** be on site for the inspection.
- **Footings:** After forms and reinforcing are in place, but **PRIOR TO POURING CONCRETE.**
- **Poured Wall/Core Fill:** After forms and reinforcing are in place, but **PRIOR TO POURING CONCRETE.** For block walls (core-fill), rebar must be in place.
- **Foundation/Drainage (often referred to as the backfill inspection):** Prior to backfilling. Exterior drainage system, waterproofing, exterior insulation and wall bracing must be in place. IF a foundation as-built survey is required by the municipality, the survey **MUST** be submitted **AND** approved before the foundation inspection will be performed.
- **Radon Rough-In:** Prior to pouring slab. Under slab radon piping installed, and installation of 4" rock or sand base complete. Note: If a sand base is used, geotextile drainage matting must be installed.
- **Under Slab Vapor Retarder:** (Can take place at the same time as the radon rough-in.) Min 6' mil poly installed (with minimum 12" lap).
- **Braced Wall Panel Inspection**
- **Framing: All plumbing, mechanical, fireplace, fire sprinkler and electrical rough-ins (if applicable) must be approved prior to this inspection.** (See handouts for those items for details about their rough-in and final inspections.) In addition to the approved plans, truss specs and any required engineering must be available at this inspection. Fire-blocking and wall bracing must be in place.
- **Energy Efficiency (insulation and vapor barrier):** All insulation, chutes, and poly must be installed, and poly taped and sealed, for this inspection. The wall and roof sheathing must be protected on the exterior, and the roof must be shingled.
- **Drywall/Fire Rated Assemblies (if applicable):** Assemblies must be installed per approved plans.
- **Lath (if applicable):** After weep screed, paper, and kick-out flashing are applied, but **BEFORE BROWN COAT.**
- **Final: All plumbing, mechanical, fireplace, fire sprinkler and electrical finals (if applicable) must be approved prior to this inspection.** The attic insulation and building certificates must be provided/posted. See the New Home Final Checklist (attached) for a list of items that must be complete.

Warning: The inspector may issue an order to remove materials to verify compliance with the MN State Building Code and manufacturer's installation requirements.

If a re-inspection is required, a re-inspection fee will apply. The permit holder (the signing applicant) or the permit holder's representative must meet the inspector at the site to provide access. The re-inspection will not be conducted if the re-inspection fee is not paid.

Note: The State of Minnesota requires that all residential building contractors, remodelers, roofers, plumbers, and electricians obtain a state license unless they qualify for a specific exemption from the licensing requirements. Any person claiming an exemption must provide a copy of a Certificate of Exemption from the Department of Labor & Industry to the Municipality before a permit can be issued. To determine whether a particular contractor is required to be licensed or to check on the licensing status of individual contractors, please call the Minnesota Department of Labor & Industry at 651-284-5065 or toll free 1-800-342-5354.

Note: For specific code requirements, please contact the Building Inspection Department at 952-442-7520 or 888-446-1801 or e-mail: info@mnspect.com.

NEW HOME FINAL -CHECKLIST

P F N/A

EXTERIOR:

- Address posted, secured, visible from the street fronting the property (contrasting color, min. 4" numbers/letters) (R319.1)
- Exterior exhaust clearances
- Grading: vegetation established or Sediment/Erosion Control in place
- Earth-wood separation – 6" (R317.1(5))
- Stucco exterior – weep screed clearance 4" above earth or 2" above paved areas (R703.6.2.1)
- Protective covering over exposed exterior waterproofing and/or insulation, extends a minimum of 6" below grade (R402.1.1)
- Ventilation intake/exhaust outlets have permanent, weather-resistant ID labels (R403.5.15)
- Grade falls 6" over the first 10' (R401.3) or swales are present
- Impervious surfaces within 10' of foundation are sloped $\geq 2\%$ away from building
- Exterior wall penetrations sealed from weather/rodents (703.1)
- Roofing: kick-out flashing (where required) (R903.2.2)
- Roofing: ventilation as required (R806.2)
- Ramps (if installed) (R311.8)
- Deck: handrails (R311.7.7) and guardrails (R312.1)
- Steps and landing to house (R311.3), and handrails (R311.7.7)
- Stairway illumination (R311.7.9)

GARAGE:

- Garage fire separations: walls/ceiling (302.6)
 - Sealed: attic access (see "General" item below) (RE402.2.4)
- Door 1: Garage overhead door meets 90 mph rating (R301.2.1)
- Door 1: GDO Test: reverse, sensors, obstruction, resistance (R309.4)
- Door 2: Garage overhead door meets 90 mph rating (R301.2.1)
- Door 2: GDO Test: reverse, sensors, obstruction, resistance (R309.4)
- Garage door to home is solid wood, solid steel, or honeycomb core steel not less than 1-3/8" thick, or is labeled as 20-minute fire rated (R302.5.1)
- Steps to home

GENERAL:

- Smoke detector on each floor (installed and working) – interconnected (R314)
- Smoke detector outside of each sleeping room (installed and working) – interconnected (R314.3 and R314.4)
- Carbon monoxide detector outside of each sleeping room (10') (R315.1.1)
- Safety glazing on windows/doors where required (R308)
- Blocked patio doors (where required) (R312.2)
- Attic insulation card, insulation installer's certification and builder's certificate signed/posted (R401.3)
- Blower door test results – 3 air changes per hour (RE402.4.1.2)
- Light (natural or artificial) in every habitable room (R303.1)
- Minimum 75% of lamps in permanently installed fixtures are high-efficiency (RE404.1)
- Hallway/corridor widths 3' (R311.6) *(This section continued on next page...)*

P F N/A

GENERAL (continued)

- Ceiling height 7' (R305.1)
- Skylights (if installed) (R308.6)
- Main entry door: 32" clear width, side hinged (R311.2)
- Air intake separation (R303.5.1)
- Attic access: 22x30 and sealed (R807.1)
- Exposed poly is fire rated (302.10.1)
- Gas line shut-off on all gas appliances, AGA-approved flex connector – grounded CCST tubing (if required)

BEDROOM(S):

1 2 3 4

- Cranks on windows, egress size and sill height (R310.1)
- Window fall protection (R312.2)
- Heat register covers installed
- Smoke detector

BATHROOM(S):

1 2 3 4

- Ventilation (natural or mechanical) (R303.3)
- Shower walls 6' above floor (R307.2)

P F N/A

UTILITY ROOM:

- Sump hooked up, discharge in yard or tile along street
- Sump cover screwed down and sealed
- Water meter sealed

STAIRS:

- Rise, run, ceiling height, width, illumination, landings (R311.7)
- Handrails: height, gap/handroom, continuous, structural strength (R311.7.8)
- Guardrails: openings, structural strength (R312.1)
- Concealed space under stairs (R302.7)

BASEMENT/CRAWL SPACE:

- Exposed poly is fire rated (302.10.1)
- ½" drywall installed on underside of floor joists (R501.3)
- Crawl space access: 18" x 24" floor; 16" x 24" wall (R408.4)
- Crawl space ventilation (R408.1)

PERMIT CARD:

- Mechanical final - signed
- Fireplace final (if applicable and separate permit) - signed
- Plumbing final - signed
- Sprinkler final (if applicable and separate permit) - signed
- Electric final - signed
- Building final - signed
- Site inspection was completed (if required)

New Construction Energy Code Compliance Certificate



Per R4013 Certificate. A building certificate shall be posted on or in the electrical distribution panel.

Date Certificate Posted

Mailing Address of the Dwelling or Dwelling Unit

Municipality

Name of Residential Contractor

MN License Number

THERMAL ENVELOPE

RADON CONTROL SYSTEM

Insulation Location	Total R-Value of all Types of Insulation	Type: Check All That Apply								RADON CONTROL SYSTEM	
		Non or Not Applicable	Fiberglass, Blown	Fiberglass, Batts	Foam, Closed Cell	Foam Open Cell	Mineral Fiberboard	Rigid, Extruded Polystyrene	Rigid, Isocyanurate	Passive (No Fan)	Active (With fan and monometer or other system monitoring device)
Below Entire Slab										Location (or future location) of Fan:	
Foundation Wall										Other Please Describe Here	
Perimeter of Slab on Grade											
Rim Joist (1st Floor)											
Rim Joist (2nd Floor+)											
Wall											
Ceiling, flat											
Ceiling, vaulted											
Bay Windows or cantilevered areas											
Floors over unconditioned area											
Describe other insulated areas											

Building envelope air tightness:

Duct system air tightness:

Windows & Doors

Heating or Cooling Ducts Outside Conditioned Spaces

Average U-Factor (excludes skylights and one door)

Not applicable, all ducts located in conditioned space

Solar Heat Gain Coefficient (SHGC):

R-value

MECHANICAL SYSTEMS

Make-up Air Select a Type

Appliances	Domestic Water Heater		Cooling System		Make-up Air
Fuel Type	Capacity in Gallons:	Output in Tons:	Not required per mech. code		
Manufacturer	Input in BTUS:	SEER /EER	Powered		Interlocked with exhaust device.
Model	AFUE or HSPF%	SEER /EER	Other, describe:		Describe:
Rating or Size	Heating Loss	Heating Gain	Cooling Load	Other, describe:	
Efficiency	Residential Load Calculation			Location of duct or system:	
				Cfm's	
				" round duct OR	
				" metal duct	

MECHANICAL VENTILATION SYSTEM

Combustion Air Select a Type

Describe any additional or combined heating or cooling systems if installed: (e.g. two furnaces or air source heat pump with gas back-up furnace):

Not required per mech. code

Select Type

Passive

Heat Recover Ventilator (HRV) capacity in cfm's:	Low:	High:
Energy Recover Ventilator (ERV) capacity in cfm's:	Low:	High:
Balanced Ventilation capacity in cfm's:		

Other, describe:

Location of duct or system:

Location of fan(s), describe:

Cfm's

Capacity continuous ventilation rate in cfm's:

" round duct OR

Total ventilation (intermittent + continuous) rate in cfm's:

" metal duct

1346.6012 IFGC APPENDIX E, WORKSHEET E-1.

IFGC Appendix E, Worksheet E-1 Residential Combustion Air Calculation Method (for Furnace, Boiler, and/or Water Heater in the Same Space)	
Step 1:	Complete vented combustion appliance information: Furnace/Boiler: ___ Draft Hood ___ Fan Assisted ___ Direct Vent Input: _____ Btu/hr (Not fan Assisted) & Power Vent Water Heater: ___ Draft Hood ___ Fan Assisted ___ Direct Vent Input: _____ Btu/hr (Not fan Assisted) & Power Vent
Step 2	Calculate the volume of the Combustion Appliance Space (CAS) containing combustion appliances. The CAS includes all spaces connected to one another by code compliant openings. CAS volume: _____ ft ³
Step 3	Determine air Changes per Hour (ACH) ¹ Default ACH values have been incorporated into Table E-1 for use with Method 4b (KAIR Method). If the year of construction or ACH is not known, use method 4a (Standard Method).
Step 4:	Determine Required Volume for Combustion Air.
4a.	Standard Method Total Btu/hr input of all combustion appliances (DO NOT COUNT DIRECT VENT APPLIANCES) Input: _____ Btu/hr Use Standard Method column in Table E-1 to find Total Required Volume (TRV) TRV: _____ ft ³ If CAS Volume (from Step 2) <i>is greater than</i> TRV then no outdoor openings are needed. If CAS Volume (from Step 2) <i>is less than</i> TRV then go to STEP 5.
4b.	Known Air Infiltration Rate (KAIR) Method Total Btu/hr input of all fan-assisted and power vent appliances (DO NOT COUNT DIRECT VENT APPLIANCES) Input: _____ Btu/hr Use Fan-Assisted Appliances column in Table E-1 to find Required Volume Fan Assisted (RVFA) RVFA: _____ ft ³ Total Btu/hr input of all non-fan-assisted appliances Input: _____ Btu/hr Use Non-Fan-Assisted Appliances column in Table E-1 to find Required Volume Non-Fan-Assisted (RVNFA) RVNFA: _____ ft ³ Total Required Volume (TRV) = RVFA + RVNFA TRV = _____ + _____ = _____ ft ³ If CAS Volume (from Step 2) <i>is greater than</i> TRV then no outdoor openings are needed. If CAS Volume (from Step 2) <i>is less than</i> TRV then go to STEP 5.
Step 5:	Calculate the ratio of available interior volume to the total required volume. Ratio = CAS Volume (from Step 2) <i>divided by</i> TRV (from Step 4a or Step 4b) Ratio = _____ / _____ = _____
Step 6:	Calculate Reduction Factor (RF). RF = 1 <i>minus</i> Ratio RF = 1 - _____ = _____
Step 7:	Calculate single outdoor opening as if all combustion air is from outside. Total Btu/hr input of all Combustion Appliances in the same CAS (EXCEPT DIRECT VENT) Input: _____ Btu/hr Combustion Air Opening Area (CAOA): Total Btu/hr <i>divided by</i> 3000 Btu/hr per in ² CAOA = _____ / 3000 Btu/hr per in ² = _____ in ²
Step 8:	Calculate Minimum CAOA. Minimum CAOA = CAOA <i>multiplied by</i> RF Minimum CAOA = _____ x _____ = _____ in ²
Step 9:	Calculate Combustion Air Opening Diameter (CAOD) CAOD = 1.13 <i>multiplied by the square root of</i> Minimum CAOA CAOD = 1.13 x √Minimum CAOA = _____ in

¹If desired, ACH can be determined using ASHRAE calculation or blower door test. Follow procedures in Section 304.

1346.6014 IFGC APPENDIX E, TABLE E-1.

IFGC Appendix E, Table E-1					
Residential Combustion Air Required Volume (Required Interior Volume Based on Input Rating of Appliances)					
Input Rating (Btu/hr)	Standard Method (ft ³)	Known Air Infiltration Rate (KAIR) Method (ft ³)			
		Fan Assisted		Non-Fan-Assisted	
		1994 ¹ to Present	Pre 1994 ²	1994 ¹ to Present	Pre 1994 ²
5,000	250	375	188	525	263
10,000	500	750	375	1,050	525
15,000	750	1,125	563	1,575	788
20,000	1,000	1,500	750	2,100	1,050
25,000	1,250	1,875	938	2,625	1,313
30,000	1,500	2,250	1,125	3,150	1,575
35,000	1,750	2,625	1,313	3,675	1,838
40,000	2,000	3,000	1,500	4,200	2,100
45,000	2,250	3,375	1,688	4,725	2,363
50,000	2,500	3,750	1,875	5,250	2,625
55,000	2,750	4,125	2,063	5,775	2,888
60,000	3,000	4,500	2,250	6,300	3,150
65,000	3,250	4,875	2,438	6,825	3,413
70,000	3,500	5,250	2,625	7,350	3,675
75,000	3,750	5,625	2,813	7,875	3,938
80,000	4,000	6,000	3,000	8,400	4,200
85,000	4,250	6,375	3,188	8,925	4,463
90,000	4,500	6,750	3,375	9,450	4,725
95,000	4,750	7,125	3,563	9,975	4,988
100,000	5,000	7,500	3,750	10,500	5,250
105,000	5,250	7,875	3,938	11,025	5,513
110,000	5,500	8,250	4,125	11,550	5,775
115,000	5,750	8,625	4,313	12,075	6,038
120,000	6,000	9,000	4,500	12,600	6,300
125,000	6,250	9,375	4,688	13,125	6,563
130,000	6,500	9,750	4,875	13,650	6,825
135,000	6,750	10,125	5,063	14,175	7,088
140,000	7,000	10,500	5,250	14,700	7,350
145,000	7,250	10,875	5,438	15,225	7,613
150,000	7,500	11,250	5,625	15,750	7,875
155,000	7,750	11,625	5,813	16,275	8,138
160,000	8,000	12,000	6,000	16,800	8,400
165,000	8,250	12,375	6,188	17,325	8,663
170,000	8,500	12,750	6,375	17,850	8,925
175,000	8,750	13,125	6,563	18,375	9,188
180,000	9,000	13,500	6,750	18,900	9,450
185,000	9,250	13,875	6,938	19,425	9,713
190,000	9,500	14,250	7,125	19,950	9,975
195,000	9,750	14,625	7,313	20,475	10,238
200,000	10,000	15,000	7,500	21,000	10,500
205,000	10,250	15,375	7,688	21,525	10,763
210,000	10,500	15,750	7,875	22,050	11,025
215,000	10,750	16,125	8,063	22,575	11,288
220,000	11,000	16,500	8,250	23,100	11,550
225,000	11,250	16,857	8,438	23,625	11,813
230,000	11,500	17,250	8,625	24,150	12,075

¹The 1994 date refers to dwellings constructed under the 1994 Minnesota Energy Code. The default KAIR used in this section of the table is 0.20 ACH.

²This section of the table is to be used for dwellings constructed prior to 1994. The default KAIR used in this section of the table is 0.40 ACH.

Table 501.31 Procedure to Determine Makeup Air Quantity for Exhaust Equipment in Dwellings Use the Appropriate Column to Estimate House Infiltration				
	One or multiple power vent or direct vent appliances or no combustion appliances ^A	One or multiple fan-assisted appliances and power vent or direct vent appliances ^B	One atmospherically vented gas or oil appliance or one solid fuel appliance ^C	Multiple atmospherically vented gas or oil appliances or solid fuel appliances ^D
1a) pressure factor (cfm/sf)	0.15	0.09	0.06	0.03
b) conditioned floor area (sf) (including unfinished basements)				
Estimated House Infiltration (cfm): [1a x 1b]				
2. Exhaust Capacity				
a) continuous exhaust-only ventilation systems (cfm): (not applicable to balanced ventilation systems such as HRV)				
b) clothes dryer	135	135	135	135
c) 80% of largest exhaust rating (cfm): (not applicable if recirculating system or if powered makeup air is electrically interlocked and matched to exhaust)				
d) 80% of next largest exhaust rating (cfm): (not applicable if recirculating system or if powered makeup air is electrically interlocked and matched to exhaust)	not applicable			
Total Exhaust Capacity (cfm): [2a+2b+2c+2d]				
3. Makeup Air Requirement				
a) Total Exhaust Capacity (from above)				
b) Estimated House Infiltration (from above)				
Makeup Air Quantity (cfm): [3a – 3b] (if value is negative, no makeup air is needed)				
4. For Makeup Air Opening Sizing, refer to Table 501.3.2				

^A Use this column if there are other than fan-assisted or atmospherically vented gas or oil appliances or if there are no combustion appliances.

^B Use this column if there is one fan-assisted appliance per venting system. Other than atmospherically vented appliances may also be included.

^C Use this column if there is one atmospherically vented (other than fan-assisted) gas or oil appliance per venting system or one solid fuel appliance.

^D Use this column if there are multiple atmospherically vented gas or oil appliances using a common vent or if there are atmospherically vented gas or oil appliances and solid fuel appliances.

	One or multiple power vent or direct vent appliances or no combustion appliances ^A	One or multiple fan-assisted appliances and power vent or direct vent appliances ^B	One atmospherically vented gas or oil appliance or one solid fuel appliance ^C	Multiple atmospherically vented gas or oil appliances or solid fuel appliances ^D	Passive makeup air opening duct diameter ^{E,F,G}
Type of opening or system	(cfm)	(cfm)	(cfm)	(cfm)	(inches)
Passive Opening	1-36	1-22	1-15	1-9	3
Passive Opening	37-66	23-41	16-28	10-17	4
Passive Opening	67-109	42-66	29-46	18-28	5
Passive Opening	110-163	67-100	47-69	29-42	6
Passive Opening	164-232	101-143	70-99	43-61	7
Passive Opening	233-317	144-195	100-135	62-83	8
Passive Opening with Motorized Damper	318-419	196-258	136-179	84-110	9
Passive Opening with Motorized Damper	420-539	259-332	180-230	111-142	10
Passive Opening with Motorized Damper	540-679	333-419	231-290	143-179	11
Powered Makeup Air ^H	>679	>419	>290	>179	not applicable

- ^A Use this column if there are other than fan-assisted or atmospherically vented gas or oil appliances or if there are no combustion appliances.
- ^B Use this column if there is one fan-assisted appliance per venting system. Other than atmospherically vented appliances may also be included.
- ^C Use this column if there is one atmospherically vented (other than fan-assisted) gas or oil appliance per venting system or one solid fuel appliance.
- ^D Use this column if there are multiple atmospherically vented gas or oil appliances using a common vent or if there are atmospherically vented gas or oil appliances and solid fuel appliance(s).
- ^E An equivalent length of 100 feet of round smooth metal duct is assumed. Subtract 40 feet for the exterior hood and ten feet for each 90-degree elbow to determine the remaining length of straight duct allowable.
- ^F If flexible duct is used, increase the duct diameter by one inch. Flexible duct shall be stretched with minimal sags.
- ^G Barometric dampers are prohibited in passive makeup air openings when any atmospherically vented appliance is installed.
- ^H Powered makeup air shall be electrically interlocked with the largest exhaust system.

Braced wall line ID →	Method		Contributing length (ft)													
	Method	Contributing length (ft)	Method	Contributing length (ft)	Method	Contributing length (ft)	Method	Contributing length (ft)	Method	Contributing length (ft)	Method	Contributing length (ft)	Method	Contributing length (ft)	Method	Contributing length (ft)
Story →																
Braced wall line criteria																
Average spacing to next parallel BWL (ft)																
Tabular required length of bracing (ft)																
Exposure factor (see table)	X		X		X		X		X		X		X		X	
Roof eave-to-edge height factor (see table)	X		X		X		X		X		X		X		X	
Wall height factor (see table)	X		X		X		X		X		X		X		X	
Number of BWLs factor (see table)	X		X		X		X		X		X		X		X	
2 BWLs = 1.0																
3 BWLs = 1.3																
4 BWLs = 1.45																
≥ 5 BWLs = 1.6																
Onit interior finish material factor = 1.4	X		X		X		X		X		X		X		X	
Interior gypsum board fastener spacing reduced to 4" o.c., factor = 0.7	X		X		X		X		X		X		X		X	
Adjusted required length of bracing (ft) →																
BWP ↓																
Contributing length per Table R602.10.5	1															
	2															
	3															
	4															
	5															
	6															
	7															
Partial credit per Table R602.10.5.2 for intermittent methods only																
Total contributing length of wall bracing →																
Total contributing z adjusted required?	Y - N		Y - N		Y - N		Y - N		Y - N		Y - N		Y - N		Y - N	
BWP's spaced ≤ 20' edge-to-edge	Y - N - NA		Y - N - NA		Y - N - NA		Y - N - NA		Y - N - NA		Y - N - NA		Y - N - NA		Y - N - NA	
Length of BWL (ft)																
BWL has min. 2 BWP's or BWL ≤ 16' has 1-4B' BWP	Y - N		Y - N		Y - N		Y - N		Y - N		Y - N		Y - N		Y - N	
BWP at or begins within 10' of end	Y - N		Y - N		Y - N		Y - N		Y - N		Y - N		Y - N		Y - N	
Continuous sheathing only; end condition per Figure R602.10.7	1 2 3 1 2 3		1 2 3 1 2 3		1 2 3 1 2 3		1 2 3 1 2 3		1 2 3 1 2 3		1 2 3 1 2 3		1 2 3 1 2 3		1 2 3 1 2 3	
	4 5 4 5		4 5 4 5		4 5 4 5		4 5 4 5		4 5 4 5		4 5 4 5		4 5 4 5		4 5 4 5	
BWL compliance	Pass		Fail													

TABLE R602.10.3(1) BRACING REQUIRED BASED ON WIND

Minimum total length of braced wall panels required along each brace/panel line (ft) *

SWL SPACING	UB		OB	DWG. WSP, SFB, PBS, PCP, HPS, CS-SFB	DWB, WSP, SFB, PBS, PCP, HPS, CS-SFB	CS-WSP, CS-O, CS-PF
	3.5	7.0				
10	3.5	7.0	3.5	2.0	2.0	2.0
20	7.0	14.0	7.0	4.0	4.0	3.5
30	9.5	19.0	9.5	5.5	5.5	5.0
40	12.5	25.0	12.5	7.5	7.5	6.0
60	18.5	37.0	18.5	10.5	10.5	7.5
80	24.5	49.0	24.5	14.0	14.0	10.0
100	30.5	61.0	30.5	17.0	17.0	12.5
120	36.5	73.0	36.5	20.0	20.0	15.0
140	42.5	85.0	42.5	23.0	23.0	17.5
160	48.5	97.0	48.5	26.0	26.0	20.0
180	54.5	109.0	54.5	29.0	29.0	22.5
200	60.5	121.0	60.5	32.0	32.0	25.0
220	66.5	133.0	66.5	35.0	35.0	27.5
240	72.5	145.0	72.5	38.0	38.0	30.0
260	78.5	157.0	78.5	41.0	41.0	32.5
280	84.5	169.0	84.5	44.0	44.0	35.0
300	90.5	181.0	90.5	47.0	47.0	37.5
320	96.5	193.0	96.5	50.0	50.0	40.0
340	102.5	205.0	102.5	53.0	53.0	42.5
360	108.5	217.0	108.5	56.0	56.0	45.0
380	114.5	229.0	114.5	59.0	59.0	47.5
400	120.5	241.0	120.5	62.0	62.0	50.0
420	126.5	253.0	126.5	65.0	65.0	52.5
440	132.5	265.0	132.5	68.0	68.0	55.0
460	138.5	277.0	138.5	71.0	71.0	57.5
480	144.5	289.0	144.5	74.0	74.0	60.0
500	150.5	301.0	150.5	77.0	77.0	62.5
520	156.5	313.0	156.5	80.0	80.0	65.0
540	162.5	325.0	162.5	83.0	83.0	67.5
560	168.5	337.0	168.5	86.0	86.0	70.0
580	174.5	349.0	174.5	89.0	89.0	72.5
600	180.5	361.0	180.5	92.0	92.0	75.0
620	186.5	373.0	186.5	95.0	95.0	77.5
640	192.5	385.0	192.5	98.0	98.0	80.0
660	198.5	397.0	198.5	101.0	101.0	82.5
680	204.5	409.0	204.5	104.0	104.0	85.0
700	210.5	421.0	210.5	107.0	107.0	87.5
720	216.5	433.0	216.5	110.0	110.0	90.0
740	222.5	445.0	222.5	113.0	113.0	92.5
760	228.5	457.0	228.5	116.0	116.0	95.0
780	234.5	469.0	234.5	119.0	119.0	97.5
800	240.5	481.0	240.5	122.0	122.0	100.0
820	246.5	493.0	246.5	125.0	125.0	102.5
840	252.5	505.0	252.5	128.0	128.0	105.0
860	258.5	517.0	258.5	131.0	131.0	107.5
880	264.5	529.0	264.5	134.0	134.0	110.0
900	270.5	541.0	270.5	137.0	137.0	112.5
920	276.5	553.0	276.5	140.0	140.0	115.0
940	282.5	565.0	282.5	143.0	143.0	117.5
960	288.5	577.0	288.5	146.0	146.0	120.0
980	294.5	589.0	294.5	149.0	149.0	122.5
1000	300.5	601.0	300.5	152.0	152.0	125.0

Footnotes:
a. Linear interpolation allowed

TABLE R602.10.3(2) WIND ADJUSTMENT FACTORS

Adjustment	Story/Supporting	Wind	Factor ^{a,b}
One-story structure	B	≤ 10 ft	1.00
	C	10 ft - 15 ft	1.20
	D	15 ft - 20 ft	1.50
	E	> 20 ft	1.80
Two-story structure	B	≤ 10 ft	1.00
	C	10 ft - 15 ft	1.30
	D	15 ft - 20 ft	1.60
	E	> 20 ft	1.90
Three-story structure	B	≤ 10 ft	1.00
	C	10 ft - 15 ft	1.40
	D	15 ft - 20 ft	1.70
	E	> 20 ft	2.00
Roof only	B	≤ 10 ft	0.70
	C	10 ft - 15 ft	1.00
	D	15 ft - 20 ft	1.30
	E	> 20 ft	1.60
Roof + 1 floor	B	≤ 10 ft	1.00
	C	10 ft - 15 ft	1.15
	D	15 ft - 20 ft	1.30
	E	> 20 ft	1.50
Roof + 2 floors	B	≤ 10 ft	0.90
	C	10 ft - 15 ft	1.10
	D	15 ft - 20 ft	1.40
	E	> 20 ft	1.70
Any story	B	≤ 10 ft	0.85
	C	10 ft - 15 ft	1.05
	D	15 ft - 20 ft	1.35
	E	> 20 ft	1.65

Footnotes:
a. Linear interpolation is permitted
b. Total adjustment factor is the product of all applicable adjustment factors

TABLE R602.10.5 MINIMUM LENGTH OF BRACED WALL PANELS

METHOD	MINIMUM LENGTH (ft) *						Contributing Credit Length (ft)
	Wall Height (ft)						
DWG. WSP, SFB, PBS, PCP, HPS	8 ft	9 ft	10 ft	11 ft	12 ft		Actual ^b
	48 in	48 in	48 in	53 in	58 in		
OB	48 in	48 in	48 in	53 in	58 in		Double sided = Actual Single sided = .05 x actual
	55 in	62 in	69 in	NP	NP		
LIB	28 in	32 in	34 in	38 in	42 in		Actual ^b
	16 in	16 in	16 in	18 in	20 in		
ABW	24 in	24 in	24 in	27 in	29 in		48 in
	24 in	24 in	24 in	27 in	29 in		
Support in roof only	24 in	24 in	24 in	27 in	29 in		48 in
	24 in	24 in	24 in	27 in	29 in		
Supporting roof + 1 story	24 in	24 in	24 in	27 in	29 in		1.5 x actual ^b
	24 in	24 in	24 in	27 in	29 in		
PFG	24 in	24 in	24 in	27 in	29 in		Actual ^b
	24 in	24 in	24 in	27 in	29 in		
CS-G	18 in	18 in	18 in	20 in	22 in		Actual ^b
	24 in	24 in	24 in	27 in	29 in		
CS-PF	24 in	24 in	24 in	27 in	29 in		Actual ^b
	24 in	24 in	24 in	27 in	29 in		
Adjacent Opening Height	≤ 64 in	24 in	27 in	30 in	33 in		Actual ^b
	64 in - 68 in	36 in	36 in	36 in	36 in		
68 in - 72 in	27 in	27 in	27 in	30 in	33 in		Actual ^b
	27 in	27 in	27 in	30 in	33 in		
72 in - 76 in	30 in	30 in	30 in	33 in	36 in		Actual ^b
	30 in	30 in	30 in	33 in	36 in		
76 in - 80 in	32 in	32 in	32 in	33 in	36 in		Actual ^b
	32 in	32 in	32 in	33 in	36 in		
80 in - 84 in	35 in	35 in	35 in	36 in	36 in		Actual ^b
	35 in	35 in	35 in	36 in	36 in		
84 in - 88 in	38 in	38 in	38 in	39 in	39 in		Actual ^b
	38 in	38 in	38 in	39 in	39 in		
88 in - 92 in	43 in	43 in	43 in	43 in	43 in		Actual ^b
	43 in	43 in	43 in	43 in	43 in		
92 in - 96 in	48 in	48 in	48 in	48 in	48 in		Actual ^b
	48 in	48 in	48 in	48 in	48 in		
96 in - 100 in	44 in	44 in	44 in	44 in	44 in		Actual ^b
	44 in	44 in	44 in	44 in	44 in		
100 in - 104 in	49 in	49 in	49 in	49 in	49 in		Actual ^b
	49 in	49 in	49 in	49 in	49 in		
104 in - 108 in	54 in	54 in	54 in	54 in	54 in		Actual ^b
	54 in	54 in	54 in	54 in	54 in		
108 in - 112 in	59 in	59 in	59 in	59 in	59 in		Actual ^b
	59 in	59 in	59 in	59 in	59 in		
112 in - 116 in	64 in	64 in	64 in	64 in	64 in		Actual ^b
	64 in	64 in	64 in	64 in	64 in		
116 in - 120 in	69 in	69 in	69 in	69 in	69 in		Actual ^b
	69 in	69 in	69 in	69 in	69 in		
120 in - 124 in	74 in	74 in	74 in	74 in	74 in		Actual ^b
	74 in	74 in	74 in	74 in	74 in		
124 in - 128 in	79 in	79 in	79 in	79 in	79 in		Actual ^b
	79 in	79 in	79 in	79 in	79 in		
128 in - 132 in	84 in	84 in	84 in	84 in	84 in		Actual ^b
	84 in	84 in	84 in	84 in	84 in		
132 in - 136 in	89 in	89 in	89 in	89 in	89 in		Actual ^b
	89 in	89 in	89 in	89 in	89 in		
136 in - 140 in	94 in	94 in	94 in	94 in	94 in		Actual ^b
	94 in	94 in	94 in	94 in	94 in		
140 in - 144 in	99 in	99 in	99 in	99 in	99 in		Actual ^b
	99 in	99 in	99 in	99 in	99 in		

TABLE R602.10.6.2 PARTIAL CREDIT FOR BRACED WALL PANELS LESS THAN 48 INCHES IN ACTUAL LENGTH*

Actual Length of Braced Wall Panel (in)	Contributing Length of BWP	
	8 ft wall height	9 ft wall height
48	48	48
42	38	35
36	27	NA

Footnotes:
a. Linear interpolation is permitted



**Pre-construction Site Inspection
&
Erosion Control Escrow Deposit**

Effective June 22, 2004, the City of Mound requires a pre-construction site inspection for all significant construction projects by the Building Official and Public Works Department. This is to ensure that the site has been adequately prepared for construction including, but not limited to, silt fence installation, exposure of iron monuments, etc. A copy of the pre-construction site inspection checklist is included.

Be advised that a 24 hour notice is required for all inspection requests and that construction cannot begin until the requirements have been met and completed inspection checklists returned to the Building and Planning Department. The permit holder is responsible for calling the numbers provided below to schedule the inspections. The fee for the pre-construction site inspection is \$90.00 and will be included in the building permit fee.

Building Official (call 1st)	MnSpect	952-442-7520
	(when your inspection is set with MnSpect then call Public Works)	
Public Works	Ray Hanson	952-472-0614

An erosion control construction deposit of \$1000.00 is also required for all applications that involve land disturbing activities (i.e. silt fence, sedimentation, ground cover, etc.). The escrow deposit is required at the time of building permit issuance to offset costs associated with erosion control monitoring activities (silt fence condition, sedimentation, street sweeping, etc.). The escrow will be maintained until an appropriate ground cover on the site has been fully established.

Date: _____

Building Permit # _____

CITY OF MOUND NEW CONSTRUCTION CHECK LIST
ALL ITEMS MUST BE CHECKED AND NOTED PRIOR TO EXCAVATION

Project Description: _____

Address: _____

BUILDING OFFICIAL

1. Grading /drainage swales established away from neighbors structures:

2. Locate and show property stakes and building pad stakes:

3. Address posted on site:

4. Setback requirements:

Front: _____ Lakeshore: _____ Rear: _____ Side: _____ Side: _____

Other (corner/front): _____ Wetland(s) _____ Bluff _____

5. Permit visible on site.

6. Other(s) _____

Authorization to Proceed Initials of Official _____

PUBLIC WORKS

7. Erosion control fencing established, if necessary:

8. Verify elevation of sanitary sewer services to low floor elevations:

9. Conditions of water shut-off/service (mark with contractors stake):

10. Conditions of curb and gutter abutting property to be built:

11. Curbs properly abridged for construction traffic:

12. Conditions of storm sewer gate abutting the property (if applicable):

13. Conditions of light fixtures or any other utility fixtures abutting the property

14. Culvert inspection: _____

15. Other(s): _____

Authorization to Proceed Initials of Official _____



SURVEY REQUIREMENTS

PERMIT & ZONING APPLICATION AND AS-BUILT SURVEY REQUIREMENTS

Each certified land survey shall indicate that permanent iron monuments are in place at each lot corner. The survey shall also show the following:

1. North arrow and scale of drawing.
2. Legal description of parcel.
3. Lot area of parcel measured in square feet and dimension of all lot lines. Lot area is measured above the Ordinary High Water as listed below (929.4 for Lake Minnetonka).
4. Dimensions and location of all known easements, and type of easement.
5. Location of all existing buildings. For remodeling or addition permits, dimensions of each building and reference distances from the lot lines to the nearest point of each building must be shown.
6. Location of existing utilities, including but not limited to manholes, hydrants, catch basins power poles, and telephone boxes. Show all **existing and proposed sewer and water service locations, and where they come into the structure with dimensional ties**. Water shut off cannot be located in the driveway.
7. Front, side, and rear yard setback dimensions to existing and proposed buildings; all outside dimensions of buildings, including **decks and fireplaces**.
8. Setback dimensions to existing buildings located on adjacent lots if they are within 25 feet of side lot line; first floor and at grade elevations of corners of buildings on adjacent lots.
9. Location of irons at each side lot line establishing proposed front building line. The maintenance of these irons, once established by the surveyor, shall be the responsibility of the building permit applicant. Wood stakes or lath shall be placed at the four corners of the proposed building.
10. Location of proposed driveway, future garage site if not included with building permit application and minimum of two (2) off-street parkway spaces (325 S.F. per stall).
11. Benchmark elevation to National Geodetic Vertical Datum (N.G.V.D.) and description of location. Benchmarks are available at City Hall, 952-472-0600.
12. Grade elevations at the following points (additional elevations may be required):
 - a. Existing and proposed at each lot corner.
 - b. Existing street elevations (centerline and top of curb) at each lot line extended and both sides of proposed driveway at intersection with street.
 - c. Existing elevations on side lot lines, at extension of proposed front and rear building lines and any major grade changes.
 - d. Proposed lowest floor, garage floor, and top of foundation elevations.
 - e. Existing and proposed elevations at all major corners of building.
 - f. Existing and proposed elevations at top and bottom of any major slopes.
 - g. Proposed finished grade at front building line and/or ordinary high water line.
 - h. TOP OF BLUFF AND SETBACK FROM TOP OF BLUFF.

13. Location and elevations at top and bottom of any proposed retaining walls.
14. Dimension of lot frontage on public street and at Ordinary High Water Mark.
15. Lot width dimension as measured at the minimum front setback line and at the 50 foot lakeshore setback from the Ordinary High Water Mar.
16. Proposed direction of surface water drainage indicated by arrows and elevations, and percent of slope on driveway if applicable.
17. The Ordinary High Water elevation/contour must be shown if lot abuts body of water or is within 50 feet of said water.
18. The Floodplain elevation/contour must be shown and labeled (Both MCWD and City). Any possible wetlands should also be marked. Filling within the floodplain and wetlands shall not occur without permission from the City of Mound and the Minnehaha Creek Watershed District.

	Ordinary High Water	Flood Elevation	Lowest Floor Elevation
LAKE MINNETONKA	929.4	MCWD 931.5 / CITY 931	933
DUTCH LAKE	939.2	940	942
LAKE LANGDON	932.1	935	937

FOUNDATION SURVEY REQUIREMENTS

As part of the pre-construction site inspection the following staking is required to be completed:

1. Setback dimension stakes on the property line with setback dimension measurement to at least three foundation corners of the proposed structure.
2. Offset and grade stakes to proposed foundation corners.

After foundation is in place and prior to construction proceeding, contractor is to have surveyor verify in the field the location and elevation of building foundation per building plan requirements and a survey copy given to the City of Mound for approval to proceed.

NOTE: Foundation survey verification documentation requirement may be waived if the setbacks for the subject property are 5 feet or greater over the established minimums of front, side, and rear setback requirements for the district.



HARDCOVER CALCULATIONS

(IMPERVIOUS SURFACE COVERAGE)

PROPERTY ADDRESS: _____

OWNER'S NAME: _____

LOT AREA _____ SQ. FT. X **30%** = (for all lots)

LOT AREA _____ SQ. FT. X **40%** = (for Lots of Record)

* Existing Lots of Record may have 40 percent coverage provided that techniques are utilized, as outlined in Zoning Ordinance Section 129-385 (see back). A plan must be submitted and approved by the Building Official.

	LENGTH		WIDTH		SQ FT	
HOUSE	_____	X	_____	=	_____	
	_____	X	_____	=	_____	
TOTAL HOUSE						_____
DETACHED BUILDINGS (GARAGE/SHED)	_____	X	_____	=	_____	
	_____	X	_____	=	_____	
TOTAL DETACHED BUILDINGS.....						_____
DRIVEWAY, PARKING AREAS, SIDEWALKS, ETC.	_____	X	_____	=	_____	
	_____	X	_____	=	_____	
	_____	X	_____	=	_____	
TOTAL DRIVEWAY, ETC						_____
DECKS Open decks (1/4" min. Opening between boards) with a pervious surface under are not counted as hardcover.	_____	X	_____	=	_____	
	_____	X	_____	=	_____	
	_____	X	_____	=	_____	
TOTAL DECK						_____
	_____	X	_____	=	_____	
	_____	X	_____	=	_____	
TOTAL OTHER						_____

TOTAL HARDCOVER / IMPERVIOUS SURFACE.....

UNDER / OVER (indicate difference)

PREPARED BY _____ DATE _____

SUMMARY OF HARDCOVER RULES
Excerpts from the Mound Zoning Ordinance

Section 129-2 Definitions

Impervious cover means any surface impervious or resistant to the free flow of water or surface moisture. The term "impervious cover" shall include, but not be limited to, all driveways and parking areas whether paved or not, tennis courts, sidewalks, patios and swimming pools. Open decks (one-quarter-inch minimum opening between boards) shall not be counted in impervious cover calculations.

Lot area, minimum, means the area of a lot in a horizontal plane bounded by the lot lines, but not including any area below the ordinary high-water level as determined by the city or department of natural resources. (The ordinary high-water level for major lakes in the city: Lake Minnetonka = 929.4; Dutch Lake = 939.2; Lake Langdon = 932.1.)

Section 129-196 Requirements applicable to all residential districts

(a) Lot coverage. Impervious surface coverage of lots in residential zones shall not exceed 30 percent of the lot area. On existing lots of record, impervious coverage may be permitted to up to a maximum of 40 percent consistent with the provisions identified in section 129-385(g)(2)a.

Section 129-385 Zoning - Shoreland Management

(2) Specific standards.

- a. Impervious surface coverage of lots in residential zones shall not exceed 30 percent of the lot area. On existing lots of record, impervious coverage may be permitted by a maximum of 40 percent providing that the following techniques are utilized as applicable:
 1. Impervious areas should be drained to vegetated areas or grass filter strips through the use of crowns on driveways, direction of downspouts on gutters collecting water from roof areas, etc.
 2. Dividing or separating impervious areas into smaller areas through the use of grass or vegetated filter strips such as the use of paving blocks separated by grass or sand allowing infiltration.
 3. Use grading and construction techniques which encourage rapid infiltration such as the installation of sand or gravel sump areas to collect and percolate stormwater.
 4. Install berms to temporarily detain stormwater thereby increasing soil absorption.
- b. Impervious surface coverage in lots in the business and industrial zones shall not exceed 30 percent of the lot area. In business and industrial zones that are included within areas covered by an approved stormwater management plan, impervious surface coverage shall not exceed 75 percent of the total lot area.



BUILDING HEIGHT CALCULATION HOW-TO FORM

Per Mound City Code, Section 129-2, building height and building line are defined as follows:

Building Height. The vertical distance to be measured from the average grade of a building line to the top, to the cornice of a flat roof, to the deck line of a mansard roof, to a point on the roof directly above the highest wall of a shed roof, to the uppermost point on a round or other arch type roof, to the mean distance of the highest gable on a pitched or hip roof.

Building Line. A line parallel to the street right-of-way or the ordinary high water level at any story level of a building and representing the minimum distance which all or any part of the building is set back from said right-of-way line or ordinary high water level.

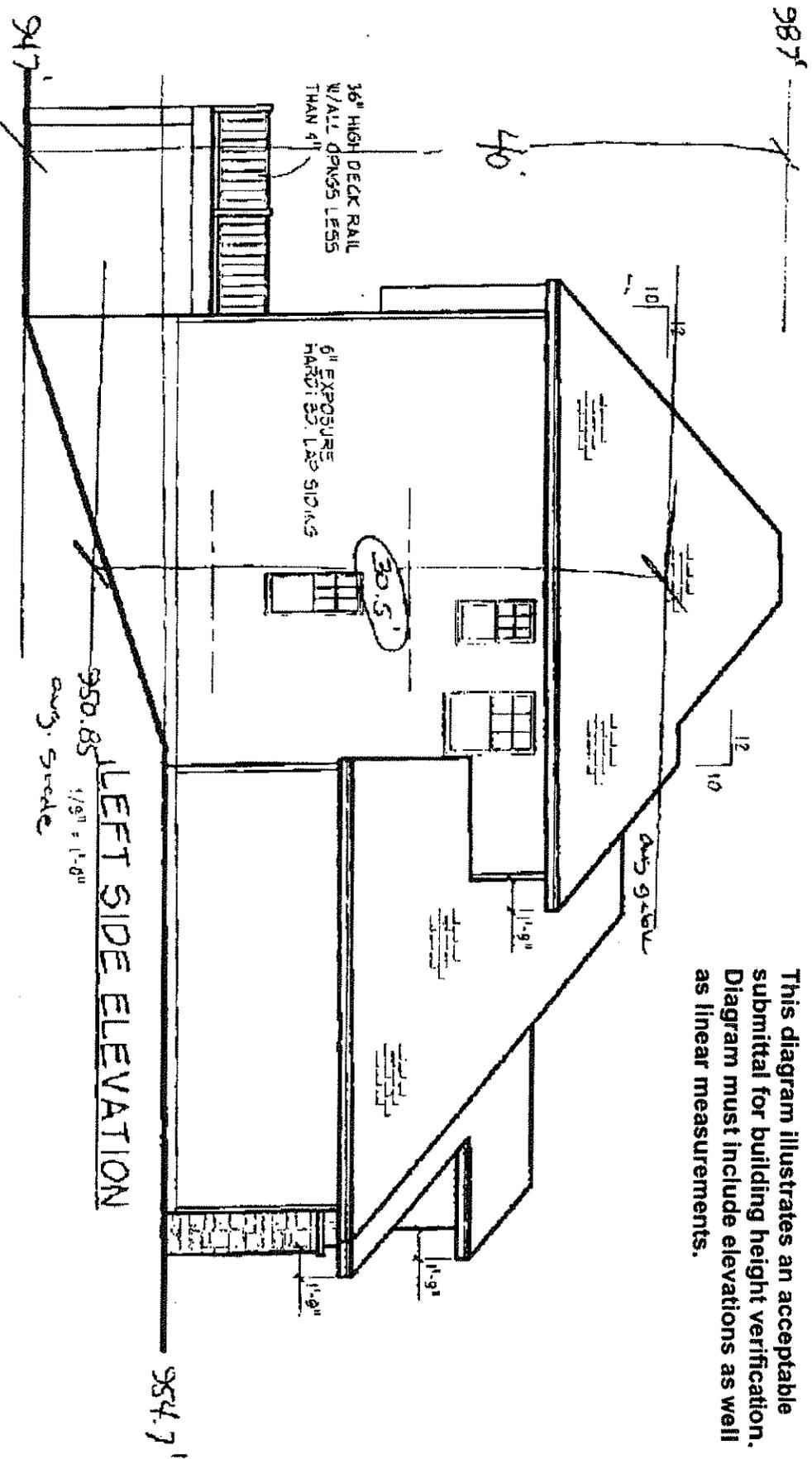
1. Describe the type of roof style proposed: _____ (i.e. pitched, flat, shed roof, etc.)
2. Provide the average grade elevation of the building line facing the street: _____ based on proposed grades referenced on submitted survey.
3. Provide the average grade elevation of the building line facing the rear of the lot or lake: _____ based on proposed grades referenced on submitted survey.
4. Provide the average grade elevation of the building line(s): _____
5. Provide the height of the proposed structure as measured from the lowest grade elevation to highest point of structure: _____.
6. Provide the proposed height of the structure based on the definition of building height referenced above: _____

The applicant (or designated representative) must provide written and graphic documentation to confirm that the proposed height of the new structure, based on the Zoning Ordinance definition, meets the height regulations of the applicable zoning district. Graphics document **must be scaled** to allow for checking by Staff.

Measuring Building Height

A building height verification must be submitted with the building permit application on any new home construction or addition.

This diagram illustrates an acceptable submittal for building height verification. Diagram must include elevations as well as linear measurements.





2415 Wilshire Blvd
 Mound, MN 55364
 Phone 952-472-0607
 Fax 952-472-0620

BUILDING PERMIT

- Handout Given
 Lead Handout Given

TO BE FILLED OUT BY APPLICANT - INCOMPLETE APPS MAY NOT BE PROCESSED

SITE ADDRESS: _____ PID: _____

- 1) Was the home constructed before 1978? (YES , continue with line 2, NO continue without completing EPA Section)
- 2) Will the work disturb ≥6 sq ft of interior painted surfaces or ≥20 sq ft of exterior painted surfaces? (YES go to line 4, NO line 3)
- 3) Are there any windows being replaced? (YES , go to line 4, NO continue without completing EPA Section)
- 4) Has this home been Certified Lead Free? (YES , you MUST Attach Certification Information, NO complete line 5)
- 5) EPA Contractor Certification Number: NAT -

PROPERTY OWNER: _____ Address: _____

City: _____ State: _____ Zip: _____ Email: _____

Contact Name: _____ Phone: _____

CONTRACTOR: _____ Address: _____

City: _____ State: _____ Zip: _____ Phone: _____ Fax: _____

Contractor License No: _____ Contact Name: _____ Phone: _____

Email: _____

ARCHITECT: _____ Address: _____

City: _____ State: _____ Zip: _____ Phone: _____ Fax: _____

Email: _____ Contact Name: _____ Phone: _____

TYPE OF WORK:		<input type="checkbox"/> New Construction	<input type="checkbox"/> Deck	<input type="checkbox"/> Re-Roof
<input type="checkbox"/> Commercial	<input type="checkbox"/> Residential	<input type="checkbox"/> Change of Use	<input type="checkbox"/> Pool	<input type="checkbox"/> Re-Side
EST. VALUATION OF WORK		<input type="checkbox"/> Finish Basement	<input type="checkbox"/> Retaining Wall	<input type="checkbox"/> Shed _____
\$ _____		<input type="checkbox"/> Remodel	<input type="checkbox"/> Porch	<input type="checkbox"/> Window/Door Replacement
Square feet: _____		<input type="checkbox"/> Addition	<input type="checkbox"/> Demolition	# being replaced _____
Detailed Description of Work:		<input type="checkbox"/> Garage-Attached/Detach	<input type="checkbox"/> Misc Other	<input type="checkbox"/> Misc Other
		<input type="checkbox"/> Accessory Structure		

Signature of this application by the legal property owner or a licensed contractor, as the owner's representative, is required and authorizes the Zoning Administrator or designee and the Building Official or designee to enter upon the property to perform needed inspections. Entry may be without prior notice. I hereby acknowledge that I have read this application and state that all information is true and correct to the best of my knowledge. I further agree that all work performed will be in accordance with approved plans, specifications and conditions and to abide by all ordinances of the Municipality and the laws of the State of Minnesota regarding actions taken pursuant to this permit. I agree to pay all plan review fees even if I choose not to proceed with the work. Permit expires when work is not commenced within 180 days from date of permit, or if work is suspended, abandoned, or not inspected for 180 days. Work beyond the scope of this permit, or work without a permit or inspection, will be subject to a penalty.

SIGNATURE OF APPLICANT: _____ DATE: _____

PRINTED NAME: _____ Owner Contractor Owner's Representative

OCCUP. TYPE:	CONST. TYPE:	CODE:	BLDG SPRINKLED Yes / No		
VALUATION: \$			COPIED		APPROVED
Permit Fee: \$ _____			ZONING		
Plan Review Fee: \$ _____			CITY ENG/DPW		
State Surcharge: \$ _____			PUBLIC WORKS		
Site Inspection Fee: \$ _____				UTIL	TAX
S.E.C. Fee: \$ _____					OTHER
Investigation fee / Other Fee: \$ _____			ASSESSING/UTIL BILL		
Copy Charge (\$.25 per 8.5 x11 page) \$ _____			BUILDING OFFICAL		
License Check (\$5) / Lead Check (\$5) \$ _____					
Sub Total \$ _____					

Special Conditions/Required Setbacks: _____

Building Approval By: _____ DATE: _____

Printed Building Approval By: _____ License Verification Lead Verification - Checked By: _____

City Approval By: _____ DATE: _____

Information supplied on this form will be considered public according to the MN Government Data Practices Act.
 See reverse side for an important statement regarding Indian Mounds.

Supplemental Information for Building Permits – Indian Mounds and Earthwork Sites

Applicant is advised that there are historic Indian burial mounds and/or earthwork sites in and around the City of Mound. While many of the mounds have been severely impacted by development over the years, the mounds do receive protection under state law and penalties are imposed for unauthorized disturbance of mounds.

The City maintains some general information about possible sites in an inventory of the “Earthwork/Mound/Burial Areas” contained on the Cultural Resources Map in the Mound Comprehensive Plan and in surveys of the burial sites from Hill and Lewis in 1911 but the completeness or accuracy of this information is unknown. Additional information may be obtained through the Minnesota State Archeologist.

Any formal investigation of a site, including a determination of whether a mound or burial area exists on a subject site, is the responsibility of the property owner or developer. The issuance of permits by the City to do work on a site does not relieve the owner or the developer of that responsibility.

BUILDING PERMIT APPLICANT: PROPERTY OWNER

I, _____, understand that the State of Minnesota requires that all
Property Owner

residential building contractors, remodelers and roofers obtain a state license unless they qualify for a specific exemption from the licensing requirements. This license requirement applies to owners of residential real estate who build or improve such property for purposes of speculation or resale.

By signing this document, I attest to the fact that I am improving this house for my own use and am not building or improving this house for the purpose of reselling it. I hereby claim to be exempt from the state licensing requirements because I am not in the business of building or remodeling on speculation or for resale and that the house for which I am applying for this permit, located at:

Property Address

Mound, is the only residential structure I have built or improved in the past 24 months.

Furthermore, I acknowledge that I may be hiring independent contractors to perform certain aspects of the construction or improvement of this house and I understand that some of these contractors may be required to be licensed by the State of Minnesota. I understand that unlicensed residential contracting, remodeling, and/or roofing activity is a misdemeanor under Minn. Stat. §326B.082, subd. 16 and can also result in a fine of up to \$10,000. I further state that I understand that the filing of a false statement with the City of Mound may also result in criminal prosecution and/or civil penalties pursuant to applicable city ordinances and/or state statutes.

I have also been informed and acknowledge that by listing myself as the contractor for this project, I alone will be responsible to the City of Mound for compliance with all applicable building codes and city ordinances in connection with the work being performed on this property. **I also understand that if I hire an unlicensed contractor, my only recourse in the event I have a dispute with my contractor will be to pursue private civil action (lawsuit) against the contractor, and that even if I am successful in a lawsuit, I will not be able to make a claim for compensation from the Contractor Recovery Fund, the state's consumer protection program for licensed contractors.**

Signature

Date

For questions or information on contractor licensing, or to check the licensing status and enforcement history of a particular contractor, call the Minnesota Department of Labor and Industry, Construction Codes and Licensing Division, at (651) 284-5069 or 1-800-657-3944, or visit their web site at: www.dli.mn.gov/CCLD/RBC.