

# MEETING OF THE HISTORIC PRESERVATION COMMISSION VIA VIDEOCONFERENCE Wednesday, December 13, 2023 6:00 p.m.

# **IMPORTANT NOTICE REGARDING**

# PUBLIC ACCESS TO THE HPC MEETING & PARTICIPATION HPC will Meet Electronically on December 13, 2023

Observe and/or Listen to the Meeting (your options to joint the meeting are below):

Webinar via the link below:

https://us02web.zoom.us/j/86324338073?pwd=bFNkSnNJSHJGSms0dWdCTDYzMG0rQT09

Passcode: 439821

Or One tap mobile:

+13052241968,,86324338073#,,,,\*439821# US

+13092053325,,86324338073#,,,,\*439821# US

Or Telephone:

Dial(for higher quality, dial a number based on your current location): +1 305 224 1968 US, +1 309 205 3325 US, +1 312 626 6799 US (Chicago), +1 646 931 3860 US, +1 929 205 6099 US (New York), +1 301 715 8592 US (Washington DC), +1 507 473 4847 US, +1 564 217 2000 US, +1 669 444 9171 US, +1 669 900 6833 US (San Jose), +1 689 278 1000 US, +1 719 359 4580 US, +1 253 205 0468 US, +1 253 215 8782 US (Tacoma), +1 346 248 7799 US (Houston), +1 360 209 5623 US, +1 386 347 5053 US

Webinar ID: 863 2433 8073

Passcode: 439821

International numbers available: https://us02web.zoom.us/u/kegUglkPjM

# **Citizen Participation**

Those who wish to provide a comment during the "Public Comment" portion of the agenda may provide written comments or request video participation invites to the Director of Planning and Development ahead of the meeting. Please specify which case and portion of the agenda you wish to comment.

ALL written comments or video participation invites must be received **no later than 12:00 p.m. the day of the meeting**. Comments may be sent via email to: <u>jwagner@ucitymo.org</u> or mailed to the City Hall – 6801 Delmar Blvd. – Attention John Wagner, Director of Planning and Development. Such comments will be provided to the Historic Preservation Commission prior to the meeting. Comments will be made a part of the official record and made accessible to the public online following the meeting.

Please note, when submitting your comments or invites, a <u>name and address must be provided</u>. Please also note if your comment is on an agenda or non-agenda item, and a name and address are not provided, the provided comment will not be recorded in the official record.

The City apologizes for any inconvenience the meeting format change may pose to individuals, but it is extremely important that extra measures be taken to protect employees, residents board/commission members and elected officials during these challenging times.

# **AGENDA**

# HISTORIC PRESERVATION COMMISSION

# 1. Roll Call

- **2.** Approval of Minutes February, March, April, July, August and September 2023 meetings.
- **3.** Public Comments (Limited to 3 minutes for individual's comments, 5 minutes for representatives of groups or organizations.)

ALL written comments or video participation invites must be received no later than 12:00 p.m. the day of the meeting. Comments may be sent via email to: <u>jwagner@ucitymo.org</u> or mailed to the City Hall – 6801 Delmar Blvd. – Attention John Wagner, Director of Planning and Development. Such comments will be provided to the Historic Preservation Commission prior to the meeting. Comments will be made a part of the official record and made accessible to the public online following the meeting.

Please note, when submitting your comments or invites, a <u>name and address must be provided</u>. Please also note if your comment is on an agenda or non-agenda item, and a name and address are not provided, the provided comment will not be recorded in the official record.

- 4. Old Business
  - a. None
- 5. New Business
  - a. File Number: HPC 23-08
     Address: 6330 Washington Avenue
     Applicant: Mark and Dru Swadener
     Property Owner: Dru Swadener
     Request: Parkview: Design Review for Conformance with District Standards.
     VOTE REQUIRED
- 6. Other Business
  - a. None
- 7. Reports
  - a. Council Liaison Report
- 8. Adjournment



# HISTORIC PRESERVATION COMMISSION

Videoconference (Zoom) Thursday, February 16, 2023 at 5:15 p.m.

The Historic Preservation Commission held a meeting on Thursday, February 16, 2023 via Zoom. The meeting started at 5:15 pm and concluded at 6:55 pm.

The meeting was called to order by Chair Donna Leach at 5:15 p.m.

# 1. Roll Call

<u>Present</u> Donna Leach, Chair Chris Trahan Robert Klahr, Vice-Chair Ed Nichols Helen Fuller

<u>Staff Present</u> John Wagner, Director of Planning & Development John Mulligan, City Attorney

- 2. Public Comments none
- 3. Old Business none
- 4. New Business
  - a. File Number: HPC 23-01

Address: 6880 Washington Avenue

Applicant: Jeff White, Christner Architects

Property Owner: Center for Creative Arts (COCA)

**Request:** University City Civic Complex: Design Review for Conformance with District Standards

VOTE REQUIRED

Dr. Wagner provided a brief overview of the project and scope.Jeff White, Christner Architects provided an overview of the COCA project.General discussion ensued.

A motion was made to approve the application as proposed. It was approved by a vote of 5 yes and 0 no.

b. File Number: HPC 23-02

Address: 6900 Delmar Boulevard, 6901 Washington Avenue, 560 Trinity Avenue
 Applicant: Stacey Wehe, AIA, Managing Principal, Christner Architects
 Property Owner: RDI Real Estate, LLC, Grace United Methodist Church, Washington University – St. Louis

# **Request:** University City Civic Complex: Design Review for Conformance with District Standards

# VOTE REQUIRED

Dr. Wagner provided a brief overview of the project and scope.

Stacey Wehe provided an overview of the project as proposed by Washington University.

Dr. Wagner provided an overview of the history of the zoning requirements to this point.

Chairwoman Leach asked about lighting for the site.

Mr. Nichols voiced his concern about the synergy between the north and south side of Delmar Boulevard. General discussion ensued for several minutes.

Steve Condrin from Washington University provided comments regarding the parking garage behind the 560 Trinity building. He also noted that the University is agnostic on which version of the plan is preferred.

Ms. Fuller left the meeting at 6:30.

General discussion ensued again, including comments from several residents.

Mr. Klahr noted the plan's consistency with the Civic Plaza Master Plan. Mr. Nichols echoed Mr. Klahr's comments.

The Commission decided to table this application until March 15, 2023 to allow the Traffic Commission to review the proposal.

- 5. Other Business none
- **6. Reports** Councilmember Klein provided an update on the City's flood relief efforts and the costs associated with those efforts.
- 7. Adjournment The meeting was adjourned at 6:55 pm.



# HISTORIC PRESERVATION COMMISSION

Videoconference (Zoom) Wednesday, March 15, 2023 at 5:00 p.m.

The Historic Preservation Commission held a meeting on Wednesday, March 15, 2023 via Zoom. The meeting started at 5:00 pm and concluded at 6:29 pm.

The meeting was called to order by Vice-Chair Robert Klahr at 5:00 p.m.

# 1. Roll Call

<u>Present</u> Donna Leach (*joined at 5:20*) Chris Trahan Robert Klahr Ed Nichols Helen Fuller

<u>Staff Present</u> John Wagner, Director of Planning & Development John Mulligan, City Attorney

# 2. Public Comments – none

# 3. Old Business

a. File Number: HPC 23-02 (Continued from February 16, 2023 meeting.)
 Address: 6900 Delmar Boulevard, 6901 Washington Avenue, 560 Trinity Avenue
 Applicant: Stacey Wehe, AIA, Managing Principal, Christner Architects
 Property Owner: RDI Real Estate, LLC, Grace United Methodist Church, Washington University – St. Louis
 Request: University City Civic Complex: Design Review for Conformance with District Standards

THREE (3) VOTES REQUIRED: One for the Text Amendment, one for the Conditional Use Permit and one for the design's conformance with the University City Civic Complex Historic District Design Standards.

Dr. Wagner provided a brief overview of the project and scope and what has happened since the February meeting.

Ben Ellerman spoke about his concerns of the project.

Ruth Decker also spoke about her concerns about the loss of greenspace and increased traffic in the area.

Brad Hershey representing United Methodist Church spoke in favor of the project.

Sarah Oldam spoke about her concerns of the project.

Dr. Wagner provided an overview of the approval process to date, including approval by the Traffic Commission of Option (Plan) A.

Stacey Wehe provided another update and overview of the project as proposed by Washington University, including the revised site plan – Option A.

General discussion ensued for several minutes.

Ms. Wehe noted that the Landscape and Lighting plan was not complete.

Dr. Wagner noted that the HPC could review these documents at an appropriate time, likely in the Fall. Rob Klahr asked clarifying questions of Mr. Mulligan regarding conformance to the Civic Plaza Master Plan and the Conditional Use Permit.

General discussion ensued again.

Joanna Schooler of Washington University addressed the Commission.

Rob Klahr asked a clarifying question regarding greenspace and parking.

The Commission decided not to take a stance at this time on the Text Amendment and the Conditional Use Permit.

A motion was made to approve the application with Option A dated March 10, 2023. It was approved by a vote of 5 yes and 0 no.

- 4. New Business none
- 5. Other Business
- 6. **Reports** Councilmember Klein noted that Dennis Fuller was appointed as Ward II Councilmember.
- 7. Adjournment The meeting was adjourned at 6:30 pm.



# HISTORIC PRESERVATION COMMISSION

Videoconference (Zoom) Thursday, April 27, 2023 at 5:30 p.m.

The Historic Preservation Commission held a meeting on Thursday, April 27, 2023 via Zoom. The meeting started at 5:30 pm and concluded at 6:02 pm.

The meeting was called to order by Chair Donna Leach at 5:15 p.m.

# 1. Roll Call

<u>Present</u> Donna Leach, Chair Robert Klahr, Vice-Chair Ed Nichols Helen Fuller Pete Holness

<u>Staff Present</u> John Wagner, Director of Planning & Development

- 2. Approval of Minutes none
- 3. Public Comments none
- 4. Old Business none
- 5. New Business
  - a. File Number: HPC 23-03
     Address: 6350 Pershing Avenue
     Applicant: Paul R. Schimmele and Jill Ellen Carnaghi
     Property Owner: Paul R. Schimmele and Jill Ellen Carnaghi
     Request: Parkview: Design Review for Conformance with District Standards.
     VOTE REQUIRED

Dr. Wagner provided a brief overview of the project and scope.

Mr. Schimmele provided an overview of the project, indicating that water is coming in through the roof and collecting on the second floor...and that it is currently raining. He also indicated that a replacement with a slate roof was prohibitively expensive.

General discussion ensued.

Because a sample of the proposed shingle was not available, Dr. Wagner recommended that a web link showing the shingle be sent to the Commission subsequent to approval this evening.

Mr. Klahr noted distinction in the code that do not require approval if the roof is not visible from the street.

Chairwoman Leach indicated that "20-pound" shingle would be the correct kind to use.

A motion was made to approve the application as proposed. It was approved by a vote of 5 yes and 0 no subject to the architects (Mr. Holness and Chairwoman Leach) approval via a web link by email.

**6. Other Business** – Election of Commission officers: Rob Klahr was voted in as the new Chair of the Historic Preservation Commission.

- 7. Reports None
- 8. Adjournment The meeting was adjourned at 6:02 pm.



# HISTORIC PRESERVATION COMMISSION

Videoconference (Zoom) Wednesday, July 5, 2023 at 6:00 p.m.

The Historic Preservation Commission held a meeting on Wednesday, July 5, 2023 via Zoom. The meeting started at 6:03 pm and concluded at 6:20 pm.

The meeting was called to order by Chair Robert Klahr at 6:03 p.m.

# 1. Roll Call

Present Robert Klahr, Chair Pete Holness Christine Mackey-Ross John Tieman Chris Trahan Ed Nichols

<u>Staff Present</u> John Wagner, Director of Planning & Development

- 2. Approval of Minutes none
- 3. Public Comments none
- 4. Old Business none
- 5. New Business
  - a. File Number: HPC 23-04
     Address: 349 Westgate Avenue
     Applicant: Dan Moessner, Renewal by Andersen of St. Louis
     Property Owner: Mary Kaufmann
     Request: Parkview: Design Review for Conformance with District Standards.
     VOTE REQUIRED

Dr. Wagner provided a brief overview of the project and scope.

Mr. Ken Greene of Renewal by Andersen of St. Louis provided an overview of the project.

A brief conversation ensued.

Chairman Klahr asked some clarifying questions regarding the size and appearance of the new windows.

A motion was made to approve the application as proposed. It was approved by a vote of 6 yes and 0 no.

b. File Number: HPC 23-05 Address: 222 Linden Avenue Applicant: Robert Reeb Construction, Inc.
Property Owner: Mary Russe
Request: Linden-Kingsbury: Design Review for Conformance with District Standards.
VOTE REQUIRED

Dr. Wagner provided a brief overview of the project and scope on behalf of the Applicant. A brief conversation ensued.

A motion was made to approve the application as proposed. It was approved by a vote of 6 yes and 0 no

# 6. Other Business – None

- 7. Reports None
- 8. Adjournment The meeting was adjourned at 6:20 pm.



# HISTORIC PRESERVATION COMMISSION

Videoconference (Zoom) Wednesday, August 2, 2023 at 5:15 p.m.

The Historic Preservation Commission held a meeting on Wednesday, August 2, 2023 via Zoom. The meeting started at 5:15 pm and concluded at 6:02 pm.

The meeting was called to order by Chair Robert Klahr at 5:22 p.m.

# 1. Roll Call

<u>Present</u> Robert Klahr, Chair Pete Holness Christine Mackey-Ross John Tieman Hellen Fuller

<u>Staff Present</u> John Wagner, Director of Planning & Development

- 2. Approval of Minutes none
- 3. Public Comments none
- 4. Old Business none
- 5. New Business
  - a. File Number: HPC 23-06
     Address: 6316 Westminster Place
     Applicant: Adam Pratt and Jessica Smith
     Property Owners: Adam Pratt and Jessica Smith
     Request: Parkview: Design Review for Conformance with District Standards.
     VOTE REQUIRED

Dr. Wagner provided a brief overview of the project and scope.

Adam Pratt and Jessica Smith – homeowners – provided an overview of the project.

A brief conversation ensued.

Chairman Klahr asked some clarifying questions regarding the size and appearance of the new windows.

A motion was made to approve the application as proposed. It was approved by a vote of 5 yes and 0 no.

- 6. Other Business None
- 7. Reports None
- 8. Adjournment The meeting was adjourned at 5:45 pm.



# HISTORIC PRESERVATION COMMISSION

Videoconference (Zoom) Thursday, September 21, 2023 at 6:00 p.m.

The Historic Preservation Commission held a meeting on Thursday, September 21, 2023 via Zoom. The meeting started at 6:04 pm and concluded at 7:20 pm.

The meeting was called to order by Chair Robert Klahr at 6:04 p.m.

# 1. Roll Call

<u>Present</u> Robert Klahr, Chair Pete Holness John Tieman Chris Trahan Ed Nichols

<u>Staff Present</u> John Wagner, Director of Planning & Development Mary Kennedy, Senior Planner

- 2. Approval of Minutes none
- 3. Public Comments none
- 4. Old Business none
- 5. New Business
  - a. File Number: HPC 23-07

Address: 6650 Delmar Boulevard (aka: Commerce Bank Site) Applicant: Subtext Property Owner: Multiple Request: Referral to Historic Preservation Commission VOTE REQUIRED

Rob Klahr abstained from participation in discussion of HPC 23-07 as Subtext is a current client of his law firm.

Dr. Wagner provided a brief overview of the project and scope.

Ryan Bumb of Subtext provided an overview of the project.

Conversation ensued.

Chairman Klahr asked some clarifying questions regarding the size and appearance of the new windows.

A motion was made to **conceptually** approve the application as proposed, with the understanding that it returns to the Commission before issuance of a building permit. **The motion was approved by a vote of 4 yes and 0 no. (Chair Klahr abstained.)** 

### b. Comprehensive Plan Discussion

Ms. Kennedy provided an overview of the Comprehensive Plan. Conversation ensued.

- 6. Other Business None
- 7. Reports None
- 8. Adjournment The meeting was adjourned at 7:20 pm.



Department of Community Development

6801 Delmar Boulevard, University City, Missouri 63130, Phone: (314) 862-6767, Fax: (314) 862-3168

# HISTORIC PRESERVATION COMMISSION MEETING

# STAFF COVER SHEET – HPC 23-08

APPLICATION TYPE:	Design Review for Conformance with District Standards
-------------------	---

Mark and Dru Swadener

LOCATION: 6330 Washington Avenue

HISTORIC DISTRICT: Parkview Historic District (Local Historic District)

PROJECT DESCRIPTION: Construction of a new detached garage

APPLICANT:

PROPERTY OWNER: Dru Swadener

COUNCIL WARD:

EXISTING ZONING: SR – Single Family Residential

1

EXISTING LAND USE: Single Family Residential

SURROUNDING ZONING AND LAND USE

North:	SR-Single Family Residential District	Single Family Residential
East:	SR-Single Family Residential District	Single Family Residential
South:	SR-Single Family Residential District	Single Family Residential
West:	SR-Single Family Residential District	Single Family Residential

COMPREHENSIVE PLAN CONFORMANCE

[] Yes [] No [x] No reference

ZONING ORDINANCE CONFORMANCE

[x] Yes [] No [] No reference

PERTINENT CODE: §400.1860 Parkview Historic District.

SECTION(S): §400.1870(A)(1): Construction of additions.

§400.1870(A)(2): The addition, demolition, removal or substantial alteration of exterior features of all structures in the district, which features include, but are not limited to, roofs, exterior walls, window and door openings, porches and balconies.

Prepared by: John Wagner, Ph.D., Director of Planning and Development

# HISTORIC PRESERVATION COMMISSION OF UNIVERSITY CITY

# APPLICATION FOR REVIEW

In University City Historic Districts, and for University City Landmarks, a review is required for new construction and for certain alterations which are specified in the regulations for the district or landmark. A Review <u>shall not</u> be required for ordinary maintenance or repairs when materials to be used are similar to or compatible with those originally used when the buildings within the historic district were built. The materials submitted with this application will be reviewed by the Historic Preservation Commission for compliance with the standards for each historic district or landmark.

The Historic Preservation Commission encourages property owners to seek preliminary guidance of the Commission at the beginning of any renovation project to avert unnecessary expense and scheduling problems that might surface at the end of the review process. Please call the Planner at 314-505-8501 for meeting times of the Commission and to be placed on the agenda.

In addition to this review, Building Permits are required for new construction, structural changes, fences and certain other activities. Property owners are advised to check with the Building Commissioner's Office to determine if a Building Permit is needed.

NAME OF HISTORIC DISTRICT       PARKVIEW         GENERAL INFORMATION         Owner       DRU         SWADENER       Phone         Phone       918-851-2097
GENERAL INFORMATION Owner <u>DRU</u> SWADENER Phone <u>918-831-209</u> 7
Address (if different) N/n
Applicant <u>MARK IPRU 3 WAPENER</u> Phone <u>918-851-2097</u>
Address N/A
Signature of applicant March W Swords Date 11/2/2023
TYPE OF REVIEW REQUESTED
X_Design Review for Conformance with District Standards
Preliminary Review/Consultation

\_\_\_\_Permit to Demolish

\_\_\_\_Designation of Historic Landmark or District

Other:

**DESCRIPTION OF PROPOSED PROJECT:** Please include or attach sufficient information for the Commission to judge your proposed work; insufficient information may cause a delay in approval. Also, please include a brief explanation of the reason for the proposed change and a specific list of the exact proposed changes in detail on the following page.

List of Proposed Changes:
1. EXPANSION OF KITCHEN FOOTPRINT
2. ATTACHING NEW EXPANSION TO CONTIGUOUS ROOM
3
1
т
5.
6
7
8
0
10.

**SUBMITTAL REQUIREMENTS:** Submit at least 21 days prior to regularly scheduled meeting. Required: Photographs of the area, building or buildings to be affected by your project.

Submit, as appropriate, 12 copies of		
XPlans	Specifications	Site Plans
Materials Samples	Manufacturer's Literature	Other
Drawings of installation details		
Photoconies and reductions are acco	ntable	
Thorocopies and reductions are acce	plable.	
SUBMIT TO: Depar	tment of Community Development	t, 4TH Floor
6801	Delmar Blvd.	
Unive	ersity City, MO 63130	
(314)	862-3168 (FAX)	
FOR FURTHER ASSISTANCE (	CALL: Zach Greatens, Planner (31-	4) 505-8501

COMMENTS:\_\_\_\_\_

Please note: This application form must be submitted with the plans for the building permit application.

*Q:\WPOFFICE\Permit Applications\f-APP.hpc3.doc* 

# Swadener Residence - Kitchen Expansion

# 6330 Washington Ave. University City. MO 63130

GE	ENERAL NOTES
1.	THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS AND NOTIFY THE ARCHITECT AND OWNER OF ANY DISCREPENCIES PRIOR TO COMMENCING WORK.
2.	CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD AND NOTIFY ARCHITECT AND OWNER OF ALL DISCREPANCIES PRIOR TO COMMENCING WORK.
3.	CONTRACTOR SHALL VERIFY AND BECOME FAMILIAR W/ ALL EXISTING CONDITIONS.
4.	THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS INCLUDING THE BUILDING AND MAINTENANCE OF (DUST TIGHT PARTITIONS, DAILY VACUUMING, MOPPING, FLOOR MATS AND PROVISIONS OF CLEAN FLOOR MATS AT PROJECT ENTRANCES) TO PREVENT THE INFILTRATION OF DIRT AND DUST FROM THE CONSTRUCTION AREAS INTO THE OWNER OCCUPIED AREA.
5.	PATCH ALL FINISHES DISTURBED BY THE WORK AND WHERE UNFINISHED SURFACES HAVE BEEN EXPOSED BY DEMOLITION,PATCHING MUST MATCH ADJACENT MATERIALS, COLORS AND FINISHES.
6.	CHIP, GRIND AND / OR FILL EXISTING FLOOR SLABS AS REQUIRED TO PROVIDE SMOOTH LEVEL SURFACE SUITABLE FOR APPLICATIONS OF FINISH FLOOR MATERIALS, LEVEL ALL FLOORS TO WITHIN 1/8" PER FOOT TOLERANCE MAX., INCLUDING FLOOR LEVEL DIFFERENCES THAT OCCUR BETWEEN PARTITIONS SHOWN TO BE REMOVED.
7.	FILL ALL DEPRESSED AREAS AND HOLES IN EXISTING CONCRETE SLABS WITH FIRE RATED NON- SHRINKING CEMENTITIOUS FILL.
8.	PATCH / REPAIR FLOOR WHERE PARTITIONS, FLOOR OR FINISHES HAVE BEEN REMOVED.
9.	PATCH / REPAIR FLOORS, BASES AND WALLS TO PROVIDE AN EVEN SUBSTRATE SUITABLE FOR APPLICATIONS OF SCHEDULED FINISHES AND AS REQUIRED BY FINISH MATERIAL MANUFACTURER.
10.	ALL NEW OPENINGS THROUGH EXISTING MASONRY WALL SHALL BE REINFORCED WITH STEEL ANGLES AS REQUIRED. VERIFY LINTEL SIZE WITH ARCHITECT AND / OR STRUCTURAL ENGINEER.
11.	PIPE AND COLUMN FURRING SHALL BE HELD AS CLOSE TO THE PIPING AND / OR COLUMNS AS POSSIBLE, UNLESS OTHERWISE NOTED. VERIFY CONDITIONS WITH ARCHITECT.
12.	UNLESS OTHERWISE NOTED, ALL PARTITIONS IN SCHEDULED ROOMS SHALL BE PAINTED.
13.	WITHIN THE PROJECT LIMITS, PAINT ALL PLASTER, GYPSUM BOARD SURFACES, CONCRETE, CONCRETE, CONCRETE MASONRY UNITS, STEEL, ETC UNLESS OTHER FINISHES ARE SCHEDULED.
14.	ALL DIMENSIONS ARE FINISHED DIMENSIONS TO FACE OF GYP. BOARD, UNLESS NOTED OTHERWISE.
15.	OWNER SUPPLIED EQUIPMENT AND / OR FURNITURE ITEMS ARE INDICATED WITH DASHED LINES AND MARKED WITH AN (*).
16	RESTORE OR REPLACE ALL EXISTING FINISHES DAMAGED BY WORK LINDER THIS CONTRACT

16. RESTORE OR REPLACE ALL EXISTING FINISHES DAMAGED BY WORK UNDER THIS CONTRACT. 17. PROVIDE AND INSTALL FLOORING WITH POSITIVE SLOPE TO DRAIN WHERE FLOOR DRAINS OCCUR.

A.F.F. ACOUS. ACT ACST. ALUM. A.B. AP BLK'G. BD. BTM. B.O. CLG. CLO. CONC. CMU CRSC CW CLR CONT. CONTR C.J. CG CORR. CPT. DK DTL. DIA Φ D.S. DWG. DW ELEC. EWC





CHITECTURAL SHEET LIST				
A0	COVER			
A1	FOUNDATION PLAN			
A2	DEMOLITION PLAN AND FLOOR PLAN			
A3	ROOF PLAN			
A4	ELEVATIONS			
A5	BRACE WALL PANEL DETAILS			
A6	SPECIFICATIONS			
A7	SPECIFICATIONS			
A8	WALL SECTIONS			

ODE DATA			
PLICABLE CODES			
sidential Code		2018 IRC with University City Amendments	
OJECT SQUARE FOOTAGE		100 SF	
IMATIC AND GEOGRAP	HIC DESIGN CRITERIA (20	18 IRC with University City Amendments)	
OUND SNOW LOAD		20 PSF	
ND LOAD	SPEED (MPH)	90 MPH	
	TOPOGRAPHIC EFFECTS	NO	
ISMIC DESIGN CATEGO	DRY	С	
BJECT TO	WEATHERING	SEVERE	
MAGE FROM	FROST LINE DEPTH	30	
	TERMITE	MODERATE TO HEAVY	
NTER DESIGN TEMPERATURE		6 DEG F. (14 DEG C.) EXT.	
BARRIER UNDERLAYMENT REQUIRED		NO	
OOD HAZARDS		CONTACT PUBLIC WORKS AND PARKS DEPARTMENT	
R FREEZING INDEX		1,000	
AN ANNUAL TEMPERATURE		56.3	





PERMIT DOCUMENTS 10/18/2023

# FOUNDATION PLAN GENERAL AND KEYED NOTES - FIELD VERIFY ALL DIMENSIONS

- NOT USED
- ALL NAILING OF JOISTS INTO 2X4 FOUNDATION SILL PLATE TO BE PER 2018 IRC.
- NOT USED
- NOT USED
- 8" THICK REINFORCED CONCRETE FDN. WALL 3' - 9 1/4" HIGH W/ (2) #4'S TOP AND BTM.
- 8" X 24" CONCRETE FOOTING W/ 2-#4'S CONTINUOUS. BTM. OF FTG. AT 2' - 6" BELOW EXISTING GRADE.
- (2) #4 RE-BARS TOP & BOTTOM @ FOUNDATION WALL INTERSECTIONS.
- ALL DOOR AND WINDOW HEADERS TO BE (2) 2X10 UNLESS NOTED OTHERWISE.
- NOT USED

SEE GENERAL SPECIFICATIONS FOR ADDITIONAL INFORMATION



![](_page_17_Picture_13.jpeg)

![](_page_17_Picture_14.jpeg)

![](_page_17_Figure_15.jpeg)

I **(** A4 )

(2) #4 TIE RODS
 DRILL AND EPOXY
 4" EMBED

LINE OF EXISTING ADDITION ABOVE

![](_page_17_Figure_20.jpeg)

![](_page_18_Figure_0.jpeg)

/25/2023 2:47:42 PM

EXISTING FRONT PORCH (NOT SHOWN)

![](_page_18_Figure_3.jpeg)

# PLAN GENERAL AND KEYED NOTES

- 1. ALL DOOR AND WINDOW HEADERS TO BE (2) 2X10 UNLESS OTHERWISE NOTED.
- 2X12 OR TGI 12" FLOOR JOIST @ 16" O.C. (BY TGI ENGINEER) (UNLESS NOTED OTHERWISE).
   DOUBLE JOISTS UNDER PARALLEL PARTITIONS.
- 2X8 ROOF FRAMING @ 24" O.C.
- 4. NOT USED

SEE GENERAL SPECIFICATIONS FOR ADDITIONAL INFORMATION

![](_page_18_Figure_10.jpeg)

![](_page_18_Figure_11.jpeg)

B.W.P. - BRACED WALL PANEL INSTALLED ACCORDING TO 2018 IRC R602 - METHOD 3

2' - 0" P.F.

- (4) 2X WOOD POST, TYP.

> 3' - 0" I.B.W.P.

P.F. - PORTAL FRAME OR APA NARROW WALL (SEE DETAILS A6)

I.B.W.P. - INTERIOR BRACED WALL PANEL INSTALLED ACCORDING TO 2018 IRC R602 -METHOD 3

![](_page_18_Figure_17.jpeg)

0/25/2023 2:47:42 PN

![](_page_19_Figure_1.jpeg)

# ROOF PLAN GENERAL AND KEYED NOTES

- 1. LINE OF EXTERIOR WALL BELOW
- 2. 2X8 ROOF FRAMING @ 24" O.C.
- 3. NOT USED
- 4. 20 YEAR ROOF SHINGLES, TYPICAL.
- 5. NOT USED
- 6. METAL FLASHING AT ALL WALL AND ROOF INTERSECTIONS, TYPICAL.
- 7. DOWNSPOUT
- 8. CONT. GUTTER, TYPICAL.

ALL PLUMBING STACK VENTS TO BE ON BACK SIDE OF ROOF (EXACT LOCATION TO BE DETERMINED X PLUMBING CONTRACTOR.)

GALV. MTL. ROOF VENTS AS REQ'D. (1/300 S.F., TYPICAL).

SEE GENERAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.

CER THIS AN PROF BE L AND 3 REPP	TIFICATIO C DRAWING AN INSTRUMENT JSED FOR THIS SHALL NOT BE RODUCED WIT OF THE A	N #: 2006003866 D DETAILS ON IT, AS OF SERVICE, IS THE ARCHITECT AND MAY SPECIFIC PROJECT LOANED, COPIED OR HOUT THE CONSENT RCHITECT.
Swadanar Racidanca - Kitchan	Expansion	6330 Washington Ave. University City. MO 63130
	In No Date Description	
DA PR Ste DR CH	TE: OJECT even Merle ROOF AWN: ECK:	10/18/2023 NO: 23.034 Feeler A-005098 Feeler A-005098
SHE	<u> </u>	13

DUIS, 36-53(

![](_page_20_Figure_0.jpeg)

SIMPLIFIED BRACING METHOD FOR ONE AND TWO FAMILY DWELLINGS WHEN THE ENTIRE STRUCTURE IS SHEATHED WITH WOOD STRUCTURAL PANELS:

THE DESIGN PROFESSIONAL DOES NOT HAVE TO DEFINE THE BRACE WALL LINE LOCATIONS AND IDENTIFY THE PERCENTAGE OF BRACED WALL PANELS WITH RESPECT TO A BRACED WALL LINE IF ALL OF THE FOLLOWING CRITERIA ARE MET:

- THE BUILDING EXTERIOR WALLS ARE SHEATHED WITH 7/16" OR THICKER WOOD STRUCTURAL PANELS (PLYWOOD OR OSB). THE WOOD STRUCTURAL PANELS SHALL BE APPLIED TO ALL EXTERIOR WALLS, GABLE ENDS, AND BAND BOARDS. ALL VERTICAL JOINTS BETWEEN PANELS SHALL BE BLOCKED. HORIZONTAL JOINTS BETWEEN PANELS ON DETACHED DWELLINGS MAY REMAIN UNBLOCKED.
- BRACED WALL PANELS ARE LOCATED IN EVERY EXTERIOR BRACED WALL LINE IN ACCORDANCE WITH THE FOLLOWING CRITERIA: THE EDGE OF THE FIRST BRACED WALL PANEL MEETING THE WIDTH ESTABLISHED IN Α. THE TABLE BELOW IS LOCATED 12'-6" OR LESS FROM EACH END OF THE BRACED WALL LINE. EXCEPTION: THE EDGE OF THE FIRST BRACED WALL PANEL MAY BE LOCATED MORE THAN 12'-6" AND UP TO 20'-0" FROM THE END OF THE BRACED WALL LINE IF THE
  - COLLECTOR SYSTEM PANEL OFFSET" CRITERIA ON P.9 OF APPENDIX A, ONE AND TWO FAMILY WIND BRACING GUIDELINES IS ADHERED TO AND DETAILED ON THE CONSTRUCTION DOCUMENTS OR WHEN THE ENGINEER OR ARCHITECT PROVIDES CALCULATIONS AND DETAILS FOR AN ALTERNATE COLLECTOR SYSTEM. THE CENTERLINE SPACING OF BRACED WALL PANELS IN A BRACED WALL LINE MAY NOT
- EXCEED 25'. BRACED WALL PANEL LOCATIONS ARE SHOWN ON THE FLOOR PLANS OR THE ELEVATION VIEWS 3. AND MEET THE WIDTHS ESTABLISHED IN THE FOLLOWING TABLE:

TABLE 2	2		WIDTH OF SOLID PANEL A, B			
		8' WALL HEIGHT	9' WALL HEIGHT	10' WALL HEIGHT	12' WALL HEIGHT	
PLYWOOD OSB	PANEL 3:1	32"	36"	40"	48"	
SIMPLIFIED POR	TAL WALL 6:1	16" D	18" D	20" D	24" D	

- LINEAR INTERPOLATION IS PERMITTED
- WALL HEIGHT IS THE VERTICAL DISTANCE FROM THE BOTTOM OF THE SOLE/SILL PLATE TO THE TOP OF THE DOUBLE TOP PLATE. AN ADDITIONAL 2" VARIATION IN HEIGHT IS ALLOWED FOR PRE CUT STUD FRAMING.
- SIMPLIFIED PORTAL WALL PANEL, IF APPLICABLE, SHALL BE CONSTRUCTED IN C. ACCORDANCE WITH FIGURE 11 IN THE ST. LOUIS COUNTY APPENDIX A ONE AND TWO FAMILY WIND BRACING GUIDELINE. THE DESIGN PROFESSIONAL SHALL PROVIDE THIS DETAIL ON THE CONSTRUCTION DOCUMENTS.
- SIMPLIFIED PORTAL WALL WIDTH ASSUMES THE BEAM IS PLACED UNDER THE TOP PLATE D. OF THE WALL. ONE MAY COMPUTE THE REQUIRED WIDTH BASED ON A 6:1HEIGHT TO WIDTH RATIO FOR A TOP OF BEAM HEIGHT LOCATED LOWER IN THE WALL (I.E.: 20" PORTAL WALL CAN BE USED WHEN THE TOP OF BEAM IS AT 10'-0" IN A12'-0" TALL WALL).
- THE EXTERIOR WALL CORNERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FIGURES 10 AND 12 IN THE ST. LOUIS COUNTY APPENDIX A ONE AND TWO FAMILY WIND BRACING GUIDELINE. THE DESIGN PROFESSIONAL SHALL PROVIDE THESE DETAILS ON THE CONSTRUCTION DOCUMENTS.
- WHEN THE PERPENDICULAR DISTANCE BETWEEN THE EXTERIOR BRACED WALL LINES EXCEEDS 50', THE DESIGN PROFESSIONAL SHALL INCLUDE THE FOLLOWING CERTIFICATION ON THE DRAWINGS:
  - THE INTERIOR AND EXTERIOR WALL CONFIGURATION BRACES THE STRUCTURE IN ACCORDANCE WITH OR EQUIVALENT TO THE LATERAL BRACING PROVISIONS OF SECTION R602.10 OF THE 2018 EDITION OF THE IRC OR SECTION 2305 OF THE 2018 EDITION OF THE IBC.
- WALL HEIGHT MAY NOT EXCEED 12' (12'-2" ACTUAL). WALLS GREATER THAN 12' SHALL BE DESIGNED AND DETAILED BY THE ENGINEER OR ARCHITECT TO RESIST WIND LOADS IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS.

SIMPLIFIED PORTAL WALL

Α.

IF YOU WISH TO GET THE WINDOWS OR DOORS EVEN CLOSER TO THE CORNER, YOU MAY OPT TO USE SIMPLIFIED PORTAL WALL IN CONJUNCTION WITH THE CONTINUOUS SHEATHING METHOD. YOU MUST CONTINUOUSLY WOOD SHEATH YOUR STRUCTURE IN ORDER TO USE THIS OPTION. IN ADDITION, THE AMOUNT OF BRACED WALL PANELS IN THE BRACED WALL LINE SHALL MEET THE CRITERIA FOR BRACING METHOD 3 IN TABLE 2. THE ACTUAL WIDTH OF THE SIMPLIFIED PORTAL PANEL (S) MAY BE MULTIPLIED BY 1.5 WHEN CALCULATING THE EQUIVALENT WIDTH OF BRACED WALL PANELS. THIS EQUIVALENT WIDTH (IN INCHES) SHALL BE DIVIDED BY 48 TO DETERMINE THE NUMBER OF BRACED WALL PANELS. ONE SHOULD REFER TO TABLE 2 FOR THE NUMBER OF BRACED WALL PANELS USING BRACING METHOD

# EXAMPLE:

A BRACED WALL LINE USED THESE 16" WIDTH SIMPLIFIED PORTAL WALL PANELS, TWO 48" WIDE 5/16" OSB, AND ONE 24" WIDE 5/16"OSB ADJACENT TO A 36" HIGH WINDOW (LESS THAN 65% IN WALL HEIGHT PER TABLE 3).

# EQUIVALENT WIDTH OF THE SIMPLIFIED PORTAL WALL PANELS

TWO 48" WIDE 5/16" OSB ONE 24" WIDE 5/16" OSB (MEETING TABLE 3 ON 2018 IRC).

192/48" 4 BRACED WALL PANELS

IF YOU CONSTRUCT YOUR CORNER PANELS IN STRICT CONFORMANCE TO THE APA METHODS. CONTINUOUSLY SHEATH THE REMAINDER OF YOUR STRUCTURE. AND OVERLAP THE SHEATHING AT THE CORNERS AS NOTED IN FIGURE 12 (USE FIGURE 10 DETAILS IF THE BRACED WALL PANEL IS NOT LOCATED AT THE CORNER), YOU CAN REDUCE THE WIDTH OF THE BRACED WALL TO THE DIMENSIONS ARE BASED ON MAINTAINING A 6:1 RATIO OF WALL HEIGHT TO CORNER PANEL WIDTH REGARDLESS OF THE HEIGHT OF THE ADJACENT WINDOW OR DOOR OPENING.

TABLE 5	LENGTH OF SOLID PANEL AT CORNER				
	8' WALL	10' WALL			
	16"	18"	20"		

IF YOU CHOOSE TO USE THE APA NARROW WALLS, YOU MUST NOTE THEIR LOCATIONS ON YOUR BUILDING PLANS AND THE DETAILS NOTED FIGURES 10, 11, AND 12 MUST BE INCORPORATED INTO YOUR PLANS.

# NOTE:

ALL EXTERIOR FRAMING TO COMPLY W/ 602.10 FULLY SHEATH ENTIRE BUILDING W/ 1/2" PLYWOOD OR OBC STRUCTURAL PANELS. UTILIZE NARROW WALL BRACING METHOD @ GARAGE DOOR OPENINGS AND @ PANELS LESS THAN 4'-0" WIDE PER 602.10.10.3 (SEE ATTACHED DETAILS).

![](_page_21_Figure_28.jpeg)

WITH 6:1 ASPECT RATIO FRAME PER IRC R602.10.10.4

# LISTED PRODUCTS:

PROPRIETARY SYSTEMS ARE PRE-DESIGNED, PRE-MANUFACTURED BRACING PANELS THAT CAN BE USED AS PART OF THE BUILDING'S LATERAL LOAD RESISTING SYSTEM. ACCEPTABLE PRODUCTS IN ST. LOUIS COUNTY ARE THOSE "LISTED" BY A NATIONALLY RECOGNIZED INDEPENDENT TESTING LABORATORY CERTIFIED BY THE INTERNATIONAL ACCREDITATION SERVICE TO CONDUCT TESTS RELATED TO INTERNATIONAL CODE COUNCIL-EVALUATION SERVICE (ICC-ES) ACCEPTANCE CRITERIA. THE INTERNATIONAL CODE COUNCIL - EVALUATION SERVICE (ICC-ES) REPORT MUST CLEARLY INDICATE THE PROPRIETARY SYSTEM IS ACCEPTABLE AS A BRACE WALL PANEL UNDER SECTION R602.10 OF THE INTERNATIONAL RESIDENTIAL CODE / 2009. REPORTS FOR THESE PROPRIETARY SYSTEMS MAY BE FOUND AT WWW.ICC-ES.ORG.

ENGINEERED DESIGN INTERNATIONAL BUILDING CODE

IF YOU WISH TO DEVIATE FROM THE PRESCRIPTIVE REQUIREMENTS FO THE INTERNATIONAL RESIDENTIAL CODE SECTION R602.10, THEN YOU MUST HAVE THE LATERAL LOAD RESISTING SYSTEM OF YOUR BUILDING DESIGNED BY A REGISTERED DESIGN PROFESSIONAL LICENSED IN THE STATE OF MISSOURI.

TO DETERMINE WIND LOAD, THE CALCULATIONS MUST FOLLOW THE REQUIREMENTS OF SECTION 1609 OF THE INTERNATIONAL BUILDING CODE (IBC). THE BASIC WIND SPEED FOR ST. LOUIS COUNTY IS 90 MPH. PLEASE NOTE: WIND LOAD MUST BE APPLIED TO BOTH WINDWARD AND LEEWARD SIDES SIMULTANEOUSLY.

	1
	E
	(ONE BI
MIN. 3" X 11 1/4" NET HEADER	
FASTEN SHEATHING TO HEADER WITH 8D COMMON NAILS IN 3" GRID PATTERN AS SHOWN AND 3" O.C. IN ALL FRAMING (STUDS AND SILLS) (TYP.)	
1000 LB. HEADER-TO-JACK-STUD STRAP ON BOTH SIDES OF OPENING (TYP.) (INSTALL ON BACKSIDE AS SHOWN ON SIDE ELEVATION, REF. NO. LSTA24)	
MIN. (2) 2" X 4" (TYP.)	
X. HEIGHT 10' - 0"	*(*) *(*) *(*) *(*) *(*) *(*) *(*) *(*)
IF PANEL SPLICE IS NEEDED IT SHALL OCCUR WITHIN 24" OF MID-HEIGHT. BLOCKING IS REQUIRED.	0)     0)       0)
NO. OF JACK STUDS PER TABLE R502.5(1&2)	
MIN. WIDTH BASED ON 6:1 HEIGHT-TO-WIDTH RATIO: FOR EXAMPLE: 16" MIN. FOR 8'HEIGHT	
MIN. 2"X2"X3/16" PLATE WASHER ANCHOR BOLT PER R403.1.6 (TYP.)	
1 SIMPLIFIED FORTAL WALL	DIACING
NAIL SOLIT TO JOIST TABLE R6 8D COMM AT 3" O.C. BOTTOM	E PLATE PER :02.3(1) MON NAILS . TOP AND
	××××

![](_page_21_Figure_38.jpeg)

GI	ENERAL NOTES	STRUCTURAL WOOD FRAMING
1.	DO NOT SCALE DRAWINGS. USE DIMENSIONS.	NOTE: ALL EXTERIOR FRAMING TO COMPLY WITH R602.10. FULL SHEATH ENTIRE
2.	PRIOR TO BEGINNING WORK THE GENERAL CONTRACTOR SHALL REVIEW ALL ELEVATION RESTRICTIONS AND SITE CONDITIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY ERROR OR INCONSISTENCIES.	PANELS. UTILIZE NARROW WALL BRACING METHOD AT GARAGE DOOR OF R602.10.5. SEE ATTACHED DETAILS.
3.	THE GENERAL CONTRACTOR AND WINDOW MANUFACTURER SHALL VERIFY THE SIZE AND FIT OF ALL WINDOWS PRIOR TO THE MANUFACTURE AND NOTIFY ARCHITECT OF ANY ERROR OR INCONSISTENCIES.	1. ALLOWABLE DESIGN VALUES FOR STRUCTURAL WOOD MEMBER AND ROOF RAFTERS SHALL BE AS SPECIFIED IN NFPA NDS-91. AI
4.	THE GENERAL CONTRACTOR SHALL REVIEW ALL PLANS AND DETAILS AND NOTIFY ARCHITECT OF ANY ERRORS OR INCONSISTENCIES.	A. FLOOR AREAS OTHER THAN SLEEPING ROOMS L B. SLEEPING ROOMS L D. SLEEPING ROOMS L
5.	PROVIDE A 22" X 30" MINIMUM ACCESS OPENING FOR ATTIC AREAS WHICH HAVE A CLEAR HEIGHT OF OVER 30". SEE WOOD AND PLASTIC SECTION FOR TRUSS WARNING SIGNS AND/OR OBSTRUCTION RAILING NOTES.	D. DECK
6.	PROVIDE A 18" X 24" MINIMUM ACCESS OPENING FOR CRAWL SPACE. (IF REQ'D)	<ol> <li>ALL HEADERS SHALL BE (2) 2 X 10. NO. 2 SOUTHERN PINE MINIMU</li> <li>ALL PARTITIONS SHALL BE 2 X 4 STUDS AT 16" O.C. UNLESS OTHIC</li> </ol>
<u>SI</u>	TEWORK	A. <u>PER SECTION R301.3</u> : LATERALLY UNSUPPORTED BEAR WITHOUT A SEALED STRUCTURAL ANALYSIS ADDRESSI
1.	BACKFILL SHALL BE FREE OF DEBRIS AND LARGE ROCKS.	RESISTING SYSTEM OF THE STRUCTURE IN ACCORDAN (TOWNHOUSE SEISMIC DESIGN: Ss = 0.54g, S1 = 0.18g).
2.	SLOPE GRADE AWAY FROM BUILDING AT 1 INCH PER FOOT MINIMUM FOR A DISTANCE OF 8'-0" MINIMUM OR TO SWALE. ADDITIONAL VERTICAL UNITS MAY BE REQUIRED TO ACCOUNT FOR SETTLEMENT OF BACKFILL AT THE IMMEDIATE PERIMETER OF THE FOUNDATION.	HEIGHTS OR VERTICAL LOADING CONDITIONS DETAILEI SEALED STRUCTURAL ANALYSIS ADDRESSING THE CON SNOW) AND FLEXURAL BENDING (WIND). a EXCEPTION:SEALED STRUCTURAL ANALYSIS A
3.	DOWNSPOUTS, BASEMENT AREA WAY DRAINS, OR FOUNDATION DRAIN TILES ARE NOT TO BE CONNECTED TO A SANITARY SEWER.	TOWNHOUSES) FORCE RESISTING SYSTEM OF HEIGHT UP TO 12' IN LATERALLY UNSUPPORTE INCREASED BY 20% (NOTE: USE CATEGORIES
4.	PROVIDE CONCRETE SPLASH BLOCKS AT ALL DOWNSPOUTS. DOWNSPOUTS DISCHARGE SHALL BE DIRECTED AWAY FROM THE FOUNDATION	CATEGORY C ROW FOR A TOWNHOUSE.
5.	FINISHED GRADES AT BUILDING TO BE A MINIMUM OF 8" BELOW TOP OF FOUNDATION FOR WOOD FRAME WALLS AND 6"	<ol> <li>ALL RAFTERS AND JOINTS SHALL BE NO. 2 SOUTHERN PINE MINI UNLESS OTHERWISE NOTED.</li> </ol>
6		5. ALL FRAMING SHALL BE IN CONFORMANCE WITH THE NATIONAL
0.	SILTATION AND EROSION CONTROL MEASURES MUST BE PROVIDED TO PREVENT SILTATION / EROSION FROM LEAVING THE CONSTRUCTION SITE.	6. ALL BEARING POSTS SHALL RUN OR BE BLOCKED CONTINUOUSL OF FOUNDATION. PROVIDE ADEQUATE NUMBER OF WOOD STUE
C	ONCRETE	7. DOUBLE FLOOR JOINTS UNDER FIREPLACE HEARTH STAIR OPEN
1.	CONCRETE MINIMUM COMPRESSIVE STRENGTH SHALL BE:	8. PROVIDE AND INSTALL CORNER BRACING ON ALL EXTERIOR HOL
	<ul> <li>A. 2500 PSI COMPRESSIVE STRENGTH MIN AT 28 DAYS IN BASEMENT SLABS AND FOOTINGS.</li> <li>B. 3000 PSI COMPRESSIVE STRENGTH MIN AT 28 DAYS IN BASEMENT WALLS AND FOUNDATION WALLS AND FOOTINGS.</li> </ul>	9. PROVIDE CONTINUOUS 2 X 4 BLOCKING BETWEEN FLOOR JOINTS TO THE BOTTOM OF THE JOINTS NEXT TO AND ON BOTH SIDES C
	<ul> <li>a. CONCRETE SHALL BE AIR ENTRAINED AS PER 2018 INTERNATIONAL RESIDENTIAL CODE.</li> <li>C. 3500 PSI COMPRESSIVE STRENGTH MIN AT 28 DAYS IN ALL EXPOSED FLATWORK SURFACES INCLUDING GARAGE</li> </ul>	10. JOIN AND INSTALL MICROLAM OR PARALLAM BEAMS AS PER MAN
2.	SLABS. MINIMUM SIZES FOR FOOTINGS SHALL BE (EXCEEDS TABLE R403.1(1) FOR LIGHT FRAME	11. <u>PER SECTION R602.8</u> A. TOP AND BOTTOM OF ALL CONVENTIONAL, DOUBLE STU WALLS ARE TO BE FIREBLOCKED VERTICALLY AT THE C
	CONSTRUCTION): A. 8" X 16" FOR GARAGE WALLS SUPPORTING ROOF ONLY	INTERVALS NOT EXCEEDING 10'. B. FIREBLOCKING REQUIRED AT ALL SOFFITS AND DROPP
	<ul> <li>B. 8" X 16" FOR ONE STORY HOME WITHOUT BASEMENT</li> <li>C. 8" X 24" FOR ONE STORY HOME WITH BASEMENT W/ TWO (2) #4 REINFORCING BARS CONTINUOUS TYP.</li> </ul>	C. FIREBLOCKING REQUIRED BETWEEN STAIRWAY STRING ENCLOSED ACCESSIBLE SPACES UNDER STAIRS SHALL
	<ul> <li>D. 8" X 24" FOR TWO STORY FRAME RESIDENCE</li> <li>E. 8" X 30" FOR TWO STORY MASONRY RESIDENCE WITH OR WITHOUT BASEMENT</li> </ul>	SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 D. FIREBLOCKING REQUIRED AROUND VENT, PIPE, AND DU
	a. DEPTHS OF FOOTING TO INCREASE WITH FOUNDATIONS TALLER THAN 7' - 10". SEE PLANS AND DETAILS FOR SIZES.	E. FIREBLOCKING REQUIRED AT THE DWELLING UNIT SEPA DWELLINGS AND TOWNHOUSES.
	<ul> <li>b. FOUNDATION WALL HEIGHT:</li> <li>• 8" WALL THICK = 7'-10" POUR.</li> </ul>	12. ALL SOFFITS AND DROPPED CEILINGS SHALL BE FIRE BLOCKED.
3.	ALL FOOTINGS AND COLUMN PADS SHALL REST ON VIRGIN SOIL OR APPROVED COMPACTED FILL (2000 PSF MIN SOIL BEARING CAPACITY) AND BE A MINIMUM OF 2'-6" BELOW GRADE.	13. FINISHED BASEMENT STUD WALLS (INCLUDING FURRED WALLS) A. PER SECTION 602.3.1: NOTE: STORY HEIGHTS EXCEEDING STORY DESIDENCE IS OUTSIDE THE SCORE OF THE IDE
4.	PIERS SHALL EXTEND MINIMUM 2"-0" INTO UNDISTURBED SOIL OR APPROVED COMPACTED FILL (2000 PSF MIN SOIL BEARING CAPACITY) AND BE A MINIMUM 2"-6" BELOW GRADE.	ALONGWITH FOUR SETS OF DETAILED PLANS PROPERL REGISTERED DESIGN PROFESSIONAL SHALL BE SUBMI
5.	1/2 DIAMETER ANCHOR BOLTS PLACED A MAXIMUM OF 6' - 0" O.C., SET 8" MIN INTO CONCRETE FOR ANCHORING OF ALL SILL	B. PER SECTION 602.10.3: EXTERIOR WALL BRACE METHOD OSB) SHEATHING WITH A THICKNESS NOT LESS THAN 5
	REGARDLESS OF LENGTH AND WITHIN 1'-0" OF THE END OF EACH SECTION OF PLATE. SILL PLATES TO BE ON GROUT SILL SEALER AND LEVEL	R602.3(3). (SEE ATTACHED DETAILS).
6.	BASEMENT CONCRETE FLOOR SLABS SHALL BE MINIMUM 3 1/2" THICK OVER AN APPROVED 6-MIL POLYETHYLENE VAPOR BARRIER WITH 6" MINIMUM LAPPED AND SCALED JOINTS ON 4" MINIMUM GRANUL AR BASE	14. PER SECTION 502.11.1: TRUSS DESIGN SHALL BE PROVIDED BY T STANDARDS 2018 IRC / ANSI / AF & PA NDS-2018, TPI 1-2018, AND
7.	BASEMENT WALLS AND FLOORS SHALL BE TREATED TO PROVIDE RESISTANCE TO THE INFILTRATION OF WATER AND PROPERLY REINFORCED TO WITHSTAND WATER PRESSURE AS NECESSARY.	15. ALL TRUSS BEARING IS AT EXTERIOR WALLS. INTERIOR TRUSS E NOTED ON PLANS. TRUSSES TO BE DESIGNED ACCORDINGLY. I TRUSS MFG. IS RESPONSIBLE TO NOTIFY THE ARCHITECT FOR P
8.	PER R404.1.3 OF THE 2018 INTERNATIONAL BUILDING CODE FOR REINF. REQUIREMENTS FOR HEIGHT OF UNBALANCED	FOR TRUSS DESIGN PROVIDED BY THE TRUSS MANUFACTURER.
	BACKFILL. A. MINIMUM OF TWO (2) #4 REINFORCING BARS CONTINUOUS AT THE TOP AND BOTTOM OF FOUNDATION WALLS 8" THICK UP TO A 7'-10" POUR W/ #6 VERTICAL BARS @ 48" O.C. (TYP).	16. PER SECTION R803.2.2 / TABLE R503.2.1.1(1): WHERE TRUSSES O SHEATHING SHALL BE A MINIMUM OF 15/32" THICK WITHOUT EDG SUPPORT. EDGE SUPPORT SHALL BE TONGUE AND GROOVE ED
9.	MINIMUM TWO (2) #5 REINFORCING BARS AROUND ALL WINDOW AND DOOR OPENINGS IN CONCRETE FOUNDATION AND BASEMENT WALLS. BARS TO EXTEND A MINIMUM OF 24" BEYOND CORNERS OF OPENINGS. REBAR TO SURROUND ALL	SUPPORT) OR 2X LUMBER BLOCKING. 17. ALL ROOF FRAMING SHALL BE DESIGNED TO SUPPORT THE FOLI
10	ALL FOUNDATIONS SHALL BE KEYED TO THE FOOTING.	<ul> <li>A. I OP CHORD OR TRUSSES OR ROOF RAFTERS</li> <li>B. CEILING JOINTS</li> <li>C. EXCEPTIONS:</li> </ul>
11	I. PORCH HAUNCHES AND BRACKETS REQUIRE REINFORCING. SEE DETAILS.	a. DL PLUS LL 20 LB. PER SQ. FT. REQUIRED FOR BETWEEN THE JOINT AND RAFTER OF 42" OR M
12	2. INTERIOR FOOTINGS INTEGRAL WITH CONCRETE SLAB MINIMUM 16" WIDE X 12" DEEP.	<ul> <li>b. DL MAY BE REDUCED TO 5 LB. PER SQ. FT. WH</li> <li>CLEAR HEIGHT BETWEEN JOIST AND</li> <li>CLEAR HEIGHT BETWEEN THE JOIST AND</li> </ul>

# / 2018 IPC / 2018 IMC / 2018 IFGC / 2018 IECC

22.

24

25.

). FULL SHEATH EN D AT GARAGE DOO	TIRE BUILDING WITH 1/2" PLYWOOD OR OSB STRUCTURAL R OPENING AND AT PANELS LESS THAN 4' WIDE PER		IS 11") POLIC TREADS. STA AT A MID-SPA
		19.	STAIRS WITH
FIED IN NFPA NDS-91.	. ALL FRAMING DESIGNED TO SUPPORT THE FOLLOWING	20.	PER SECTION OF THE RUN.
EEPING ROOMS	LL 40 LB PSF LL 30 LB PSF		SOFFITS PRC
N 100 SQ. FT.	LL 60 LB PSF LL 40 LB PSF	21.	GUARDS ALO AND MINIMUN BALCONIES
SOUTHERN PINE MI	NIMUM UNLESS OTHERWISE NOTED.		LEVELS IS MC

16" O.C. UNLESS OTHERWISE NOTED. UNSUPPORTED BEARING WALL HEIGHT MAY NOT EXCEED 10' IN HEIGHT ANALYSIS ADDRESSING THE WIND (AND SEISMIC IN TOWNHOUSES) FORCE UCTURE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2018 Ss = 0.54g, S1 = 0.18g). IN ADDITION, WOOD STUD WALLS EXCEEDING THE CONDITIONS DETAILED IN TABLES R602.3(5) AND R602.3.1 SHALL INCLUDE ADDRESSING THE COMBINED AXIAL COMPRESSION (LIVE, DEAD, AND/OR

RUCTURAL ANALYSIS ADDRESSING THE WIND (WIND SEISMIC IN RESISTING SYSTEM OF THE STRUCTURE IS NOT REQUIRED FORA WALL ERALLY UNSUPPORTED HEIGHT IF THE WALL BRACING IN TABLE R602.10.1 IS DTE: USE CATEGORIES A AND B ROW FOR A SINGLE FAMILY DWELLING. USE A TOWNHOUSE

SOUTHERN PINE MINIMUM AND ALL STUDS SHALL BE SPRUCE PINE OR FIR

# E WITH THE NATIONAL FOREST PRODUCTS MANUAL FOR HOME FRAMING.

LOCKED CONTINUOUSLY FROM POINT OF BEARING TO TOP IMBER OF WOOD STUDS TO ACHIEVE FILL BEARING UNDER WIDTH OF BEAM. E HEARTH STAIR OPENINGS AND ELSEWHERE AS NOTED ON PLANS.

G ON ALL EXTERIOR HOUSE FRAME WALL CORNERS.

TWEEN FLOOR JOINTS AND TOP OF STEEL BEAMS OR PROVIDE 1X4 NAILED AND ON BOTH SIDES OF THE BEAM.

AM BEAMS AS PER MANUFACTURER'S RECOMMENDATIONS.

### ENTIONAL, DOUBLE STUD, FURRED SPACES, AND STAGGERED STUD FRAME VERTICALLY AT THE CEILING AND FLOOR LEVELS AND HORIZONTALLY AT

SOFFITS AND DROPPED CEILINGS. EEN STAIRWAY STRINGERS AT THE TOP AND BOTTOM OF THE RUN. UNDER STAIRS SHALL HAVE WALLS. UNDER STAIR SURFACE AND ANY CLOSED SIDE WITH 1/2 GYPSUM BOARD ND VENT, PIPE, AND DUCT PENETRATIONS OF CEILINGS AND FLOORS

E DWELLING UNIT SEPARATION LINE OF THE CORNICES OF TWO FAMILY

IALL BE FIRE BLOCKED. DING FURRED WALLS) SHALL BE FIRESTOPPED AT THE ROPPED CEILING LINE. RY HEIGHTS EXCEEDING 12' (E.G. ATRIUM RANCH OR AN OPEN FOYER ON A 2 THE SCOPE OF THE IRC 2009. ONE SET OF STRUCTURAL CALCULATIONS AILED PLANS PROPERLY SIGNED, SEALED, AND DATED BY A MISSOURI ONAL SHALL BE SUBMITTED TO THIS OFFICE. WALL BRACE METHODS (ITEM 3) WOOD STRUCTURAL PANEL (PLYWOOD OR IESS NOT LESS THAN 5/16' FOR 16" STUD SPACING AND NOT LESS THAN 3/8"

D STRUCTURAL PANELS SHALL BE INSTALLED IN ACCORDANCE WITH TABLE HALL BE PROVIDED BY TRUSS FABRICATOR AND SHALL COMPLY WITH DESIGN

S-2018, TPI 1-2018, AND 2018 INTERNATIONAL BUILDING CODE. LS. INTERIOR TRUSS BEARING NOT ACCOUNTED FOR UNLESS SPECIFICALLY NED ACCORDINGLY. IF DESIGNED BY TRUSS MFG. WITH INTERIOR BEARING HE ARCHITECT FOR PLAN COORDINATION. ARCHITECT NOT RESPONSIBLE

1): WHERE TRUSSES OR RAFTER ARE SPACED 24" O.C. ROOF PANEL THICK WITHOUT EDGE SUPPORT OR A MINIMUM OF 1/2" THICK WITH EDGE NGUE AND GROOVE EDGES. PANEL EDGE CLIPS (AT MIDWAY BETWEEN EACH

TO SUPPORT THE FOLLOWING MINIMUMS: OF RAFTERS LL 20 LB, PER SQ, FT, DL 10 LB. PER SQ. FT.

THE FOLLOWING OCCUR

APPLIED

SQ. FT. REQUIRED FOR THOSE PORTIONS OF ATTIC WITH CLEAR HEIGHT ID RAFTER OF 42" OR MORE 5 LB. PER SQ. FT. WHEN EITHER OF THE FOLLOWING OCCURS:

BETWEEN JOIST AND RAFTER DOES NOT EXCEED 30" BETWEEN THE JOIST AND RAFTERS EXCEEDS 30" FOR NOT MORE THAN 12" BOTTOM CHORD OF TRUSSES (NOTE: APPLICABLE ONLY TO THE FOLLOWING SITUATIONS ATTIC TRUSSES WITH WEB CONFIGURATION THAT WILL NOT PERMIT A RECTANGULAR SPACE OF 42" VERTICALLY X 24 HORIZONTALLY BETWEEN THE WEBS AND BOTTOM CHORD

ATTIC TRUSSES WITH WEB CONFIGURATION THAT WILL ALLOW A RECTANGULAR SPACE OF 42" VERTICALLY X 24 HORIZONTALLY BETWEEN THE WEBS AND BOTTOM CHORD, PROVIDED THAT ALL OF ATTICS WITH DRYWALL CEILINGS BELOW THAT ARE ACCESSED ONLY BY A 22" X 30"

SCUTTLE OPENING WITHOUT PULL DOWN STAIR WAY. WARNING SIGNS ATTACHED TO THE TRUSSES ON EACH SIDE OF THE OPENING AT LEAST 36" ABOVE THE BOTTOM CHORD AND WITHIN 18" OF THE EDGE OF THE OPENING. THE SIGNS SHALL BE CONSTRUCTED OF METAL AND A MINIMUM OF 40 SQ. INCHES IN AREA WITH 1" MINIMUM HIGH LETTERS ON A CONTRASTING BACKGROUND THAT READS "WARNING-TRUSSES NOT DESIGNED FOR ATTIC STORAGE."

ATTIC AREAS OVER GARAGE AREAS WITH DRYWALL CEILINGS SHALL ALSO BE PROVIDED WITH A HORIZONTAL RAILING ATTACHED TO THE TRUSSES ON EACH SIDE OF THE OPENING AT LEAST 24" AND NOT MORE THAN 36" ABOVE THE BOTTOM CHORD. THE RAILING IS INTENDED TO BE AN OBSTRUCTION TO EASY ACCESS FOR STORAGE AND SHALL BE CONSTRUCTED OF EITHER 1 X 4" 2 X 4 OR 3/8 X 6" PLYWOOD. IT MAY BE SHOP OR FIELD

EXCEPTIONS: DL PLUS LL 20 LB. PER SQ. FT. TO BE APPLIED WHEN THE ATTIC TRUSS HAS A WEB CONFIGURATION THAT WILL ALLOW A RECTANGULAR SPACE OF 42" VERTICALLY X 24 HORIZONTALLY BETWEEN THE WEBS AND BOTTOM CHORD. PROVIDED BOTH EITHER A PLUS B OR C OCCURS THE ATTIC AREA IS ACCESSIBLE BY A PERMANENT STAIRWAY, PULL DOWN STAIRWAY OR A 22" X 30" SCUTTLE OPENING AND; THE PITCH OF THE BOTTOM CHORD IS LESS THAN 2:12 OR GARAGES WITHOUT DRYWALL CEILING.

DL MAY BE REDUCED TO 5 LB. PER SQ. FT. WHEN EITHER OR BOTH OF THE FOLLOWING OCCURS: CLEAR HEIGHT BETWEEN THE BOTTOM CHORD AND ANY OTHER MEMBER OF THE TRUSS DOES NOT EXCEED 30: CLEAR HEIGHT BETWEEN THE BOTTOM CHORD AND ANY OTHER MEMBER OF THE TRUSS EXCEEDS 30" FOR NOT MORE THAN 12" HORIZONTALLY.

- PER SECTION 311.5.3 ON ALL INTERIOR AND EXTERIOR STAIRS THE MAXIMUM RISER HEIGHT SHALL BE 8-1/4" AND THE MINIMUM TREAD DEPTH SHALL BE 9" WITH 1" NOSING. (EXCEPTION NOSING NOT REQUIRED WHERE THE TREAD DEPTH Y TABLE R301.5 NOTE NUMBER AND SIZE OF STRINGERS (2 X 12'S MINIMUM) AND MATERIAL USED FOR AIRS SHALL BE DESIGNED FOR 40 PSF LIVE LOAD OR 300 LB CONCENTRATED LOAD ON 4 SQUARE INCHES AN OF A TREAD WHICHEVER PRODUCES THE GREATER STRESS & DEFLECTIONS. 3 OR MORE RISERS REQUIRE HANDRAILS AND GUARDS. N R602.8 / R311.2.2 - FIREBLOCKING REQUIRED BETWEEN STAIRWAY STRINGERS AT THE TOP AND BOTTOM . ENCLOSED ACCESSIBLE SPACES UNDER STAIRS SHALL HAVE WALLS. UNDER STAIR SURFACE AND ANY DTECTED ON THE ENCLOSED SIDE WITH 1/2" GYPSUM BOARD. DNG OPEN-SIDED STAIRS SHALL BE A MINIMUM OF 36" IN HEIGHT ABOVE THE LEADING EDGE OF THE TREAD IM OF 36" IN HEIGHT AT THE STAIR LANDINGS. MINIMUM 36" HIGH GUARDS SHALL BE PROVIDED ALONG AREAWAYS, MEZZANINES AND OPEN-SIDED WALKING SURFACES WHERE THE DIFFERENCE IN FLOOR ORE THAN 15 1/2". EXCEPTIONS: GUARDS ARE REQUIRED FOR OPEN SIDED FRONT PORCHES MORE THAN 30" ABOVE GRADE. OPEN GUARDS SHALL HAVE INTERMEDIATE VERTICAL BALUSTERS SPACED LESS THAN 4" APART. HORIZONTAL RAILS, RAILS PARALLEL TO A LINE FORMED BY THE LEADING EDGE OF THE STAIR TREAD NOSING AND ORNAMENTAL PATTERNS THAT PROVIDE A LADDER EFFECT ARE PROHIBITED. EXCEPTIONS Α. RAILS PARALLEL TO A LINE ALONG THE STAIR TREAD NOSING ARE PERMITTED ON STAIRS TO UNFINISHED BASEMENTS PROVIDED THAT A) THE STAIRWELL OPENING ABOVE IS NO LARGER THAN THE STAIR, B) ALL OTHER GUARDRAIL SPACING CRITERIA IS MET AND C) A GRASPABLE HANDRAIL IS
- PROVIDED ON AT LEAST ONE SIDE OF THE STAIR GUARDS ALONG OPEN-SIDED FLOOR AREAS LESS 30" ABOVE THE FLOOR OR GRADE BELOW SHALL BE PERIMETER TO HAVE BALUSTERS HORIZONTAL INTERMEDIATE RAILS OR OTHER CONSTRUCTION THAT PROHIBITS A 21" SPHERE TO PASS THROUGH ANY OPENING. THE MAXIMUM CLEARANCE BETWEEN BALUSTERS ON ALL STAIR RAILINGS SHALL BE 4".
- HANDRAILS SHALL EITHER MEET CIRCULAR CROSS SECTION WITH MINIMUM DIAMETER OF 1-1/4" BUT NOT MORE THAT 2" OTHER SHAPES HAVING A MAXIMUM ALLOWABLE HORIZONTAL WIDTH OF 2-1/4 MAXIMUM GRASPABLE
- PERIMETER DIMENSION OF 6-1/4" AND OR MINIMUM 4" GRASPABLE DIMENSION INTERIOR STAIR HANDRAILS SHALL BE 30"-38" ABOVE THE NOSING UNLESS OTHERWISE NOTED.
- EXTERIOR STAIR HANDRAILS SHALL BE 34" ABOVE THE NOSING UNLESS OTHERWISE NOTED. 26
- HANDRAILS AND OTHER PROJECTIONS BELOW THE HANDRAIL SHALL NOT PROJECT MORE THAN 4 1/2" INTO REQUIRED STAIRWAY WIDTH.
- PER SECTION R311.5.1 MINIMUM CLEAR WIDTH OF STAIRWAY IS 36".
- RISERS MUST BE SOLID OR HAVE A TOE BOARD OR OTHER APPROVED GUARD WHICH LIMITS THE RISER OPENINGS TO 29. 4" MAXIMUM. OPEN RISERS ARE PROHIBITED.
- STAIR WINDERS MUST HAVE 9" MINIMUM TREAD DEPTH AT POINT NOT MORE THAN 12" FROM THE NARROW END AND BE AT LEAST 6" IN DEPTH AT THE NARROW END
- PER SECTION R502.8 CUTTING, NOTCHING, AND/OR BORING HOLES ON WOOD BEAMS, JOINTS, RAFTERS OR STUDS 31. SHALL NOT EXCEED THE LIMITATIONS NOTED IN SECTIONS R502.8, R602, AND R802.7 OF THE 2018 INTERNATIONAL BUILDING CODE
- NAILING AND FASTENING OF FLOOR. ROOF/CEILING, WALL AND ROOF SHEATHING, AND GYPSUM CONSTRUCTION SHALL BE IN ACCORDANCE WITH TABLES R602.3(1) THROUGH R602.3(4) OF THE INTERNATIONAL BUILDING CODE.
- TOP AND BOTTOM OF ALL CONVENTIONAL, DOUBLE STUD AND STAGGERED STUD FRAME WALLS TO BE FIRE BLOCKED. 33.
- PER SECTION R602.10.3 INTERIOR GYPSUM SHALL BE FASTENED IN ACCORDANCE WITH TABLER702.3.5.
- PER SECTION R803.2.3 GYPSUM SHEATHING SHALL BE FASTENED IN ACCORDANCE WITH TABLE (602.3910). 35 PER SECTION R802.10.5 - RAFTER/CEILING JOIST SYSTEMS SHALL BE NAILED TO THE TOP PLATE OF THE WALL IN ACCORDANCE WITH TABLE R602.3(1). TRUSSES SHALL BE NAILED TO THE TOP PLATE OF THE WALL WITH 3-16D NAILS TOE NAILED WITHOUT SPLITTING THE END OF THE TRUSS.

THERMAL AND MOISTURE PROTECTION

- PER SECTION R903.2.1 / R905.2.8 CORROSION-RESISTANT METAL FLASHING SHALL BE USED AT ALL ROOF INTERSECTIONS, CHANGES IN ROOF PITCH OR DIRECTION, ROOF AND WALL INTERSECTIONS, INTERSECTIONS WITH CHIMNEYS, INTERSECTIONS OF EXTERIOR WALLS AND PORCHES AND DECKS, ETC. ROLLED ROOFING OR TWO (2) LAYERS OF TYPE 1 UNDERLAYMENT MAY BE SUBSTITUTED FOR FLASHING AT THE ROOF VALLEY PROVIDED THE SHINGLES ARE INTERLACED. VALLER FLASHING BE INSTALLED PER R 905.2.8.2 CAULKING AND SEALANTS: EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES BETWEEN WALL AND FOUNDATION BETWEEN WALL AND ROOF, BETWEEN WALL PANELS AND PENETRATIONS OR UTILITY SERVICED THROUGH WALLS, FLOORS AND ROOFS, AND ALL OTHER OPENINGS IN THE EXTERIOR ENVELOPE SHALL BE SEALED IN APPROVED MANNER ALL JOINTS IN WALLS AND FLOORS TO BE WATERTIGHT PER SECTION R905.5.2 - ON ROOF SLOPED OF 1 IN 12 (IT SHALL NOT BE INSTALLED ON ROOF SLOPES BELOW 1:12) MINERAL SURFACED ROLLED ROOFING SHALL BE USED AND APPLIED PARALLEL TO THE EAVES, CONFORM TO ASTM D
- 224, D 249, D371, D 3909. PER SECTION R905.2.7 - ON ROOF SLOPES OF 2 IN 12 TO LESS THAN 4 IN 12 SHINGLES TO BE LAID OVER TWO LAYER OF TYPE 1 FELT APPLIED SHINGLE FASHION IS REQUIRED OVER THE ENTIRE ROOF. MINIMUM SHINGLE HEADLAP 2 INCHES. MINIMUM 2 FASTENERS PER SHINGLE. MINIMUM 4 FASTENERS PER STRIP SHINGLE.
- PER SECTION R905.2.7 ON ROOF SLOPES OF 4 IN 12 OR MORE WITH OVERHANG OF LESS THAN 12 INCHES. AN ICE SHIELD OF 2-LAYERS OF TYPE 1 UNDER-LAYMENT CEMENTED TOGETHER OR OF AN APPROVED WATERPROOFING MEMBRANE FROM THE EDGE OF THE EAVE TO AT LEAST 24 INCHES INSIDE THE EXTERIOR WALL LINE AT ALL OVERHANGS IS REQUIRED.
- PER SECTION R905.2.3 ALL UNDERLAYMENT TO BE A MINIMUM OF TYPE 1 (NO. 15 FELT) PER ASTM D4869-88.
- MINIMUM ROOF SLOPE SHALL BE 1/4 IN 12 WITH APPROVED MATERIALS.
- PER SECTION 1406.3.6 MOISTURE PROTECTION OF WATER-RESISTANT SATURATED FELT BUILDING PAPER (14# PER SQUARE) OR AN APPROVED PLASTIC (TYVEK, TYPAR) COVERING IS REQUIRED OVER SHEATHING MATERIAL BEHIND BRICK, STONE OR OTHER VENEERS UNLESS WATER-RESISTANT SHEATHING IS USED.
- VAPOR RETARDER FACINGS SHALL NOT BE LEFT EXPOSED IN UNFINISHED BASEMENT AREAS.
- PER SECTION 314.1.2 FOAM PLASTIC INSULATION SHALL BE SEPARATED FROM THE INTERIOR OF THE BUILDING BY A THERMAL BARRIER OF 1/2" GYPSUM WALLBOARD.
- AN EVALUATION OF THE SOIL FOR THE PRESENCE OR ABSENCE OF GROUND WATER IS REQUIRED. 11. A. IF NO GROUND WATER PRESENT:
  - PROVIDE DRAIN TILE. PERFORATED PIPE OR OTHER APPROVED DRAINAGE SYSTEM AROUND PERIMETER OF THE OUTSIDE OF THE FOUNDATION, OR INSIDE THE FOUNDATION UNDER THE SLAB WITH DRAIN DISCHARGE TO BASEMENT SUMP OR BY GRAVITY TO DAYLIGHT AN APPROVED FILTER MEMBRANE SHALL BE PLACED OVER THE TOP OF THE JOINTS/PIPE
  - PERFORATIONS. THE TILE/PIPE SHALL BE PLACED ON 2" MINIMUM GRAVEL OR CRUSHED STONE AND HAVE 6" MINIMUM COVER.
  - PROVIDE SUMP 15" IN DIAMETER X 18" DEEP WITH A FITTED COVER CONNECTED TO FOUNDATION DRAIN PIPE. A SUMP PUMP SHALL BE PROVIDED IF BASEMENT IS FINISHED OR PARTIALLY FINISHED.
  - PROVIDE DAMPPROOFING OF FLOOR SLAB OF 6 MIL POLYETHYLENE FILM BELOW SLAB, WITH d. JOINTS LAPPED 6" AND SEALED. PER SECTION 4069.1 - WALLS DAMPPROOFED WITH BITUMINOUS MATERIAL, 3 LB. PER SQ. YD. OF
  - ACRYLIC MODIFIED CEMENT, 1/8' COAT OF SURFACE BONDING MORTAR, OR BY ANY OF THE MATERIALS PERMITTED FOR WALL WATERPROOFING. (SEE GROUNDWATER PRESENT SECTION FOR THESE MATERIALS).
- IF GROUND WATER PRESENT: Β. PROVIDE DRAINAGE SYSTEM INSIDE AND OUTSIDE OF FOUNDATION.
  - DRAINAGE SYSTEM SHALL DISCHARGE BY GRAVITY TO DAYLIGHT OR INTO AN APPROVED SUMP (15" DIAMETER X 18" DEEP WITH FITTED COVER) HAVING A SUMP PUMP THAT DISCHARGES INTO AN APPROVED DISPOSAL SYSTEM.
  - PROVIDE WATERPROOFING MEMBRANE UNDER FLOOR SLAB OR RUBBERIZED ASPHALT, BUTYRYL RUBBER, NEOPRENE, OR 6 MIL POLYVINYL CHLORIDE OR POLYETHYLENE WITH JOINTS LAPPED A
  - MINIMUM OF 6 INCHES AND SEALED. PER SECTION 406.2 - WATERPROOFING TO BE APPLIED FROM THE BOTTOM OF THE WALL (OR TOP

MIN. R-13

MIN R-19

- OF FOOTING TO THE FINISHED GRADE.) ALL JOINTS IN WALLS AND FLOOR TO BE WATERTIGHT. INCREASE CONCRETE BASEMENT WALL THICKNESS TO 10".
- DESIGN REQUIREMENTS BY IEC CODE (R-VALUES INDICATED MUST BE OBTAINED BY THE INSULATION MATERIAL 12. USED, NOT BY THE TOTAL SYSTEM). MIN. R-30 ROOFING/CEILING
  - FRAME WALL & BAND JOIST FLOOR OVER UNHEATED CRAWL SPACE BASEMENT FOUNDATION WALL
  - MIN R-8 THE BASEMENT FOUNDATION WALL INSULATION SHALL EXTEND DOWN TO THE BASEMENT FLOOR SLAB OR TO A MINIMUM OF 24" BELOW OUTSIDE FINISHED GRADE WHEN THE GRADE IS ABOVE THE FLOOR SLAB ELEVATION. EXCEPTION: BASEMENTS HAVING CONCRETE FOUNDATION WALLS WITH LESS THAN 20% EXPOSURE ABOVE FINISHED GRADE (BASED ON HEIGHT OF WALL TIMES BASEMENT PERIMETER EXCLUDING UNHEATED BASEMENT GARAGES) MAY BE UNINSULATED WALLS.
- WINDOWS AND DOORS MAX. U-VALUE PER 2018 INTERNATIONAL RESIDENTIAL BUILDING CODE (IRC).
- SKYLIGHTS SHALL BE DOUBLE GLAZED AND NOT EXCEED 1% OF THE ROOF AREA. MAY BE INCREASED TO 1.8% WITH MIN. R-38 ROOF/CEILING INSULATION
- MECHANICAL DUCTWORK LOCATED IN UNHEATED CRAWL AND ATTIC SPACES SHALL BE INSULATED TO A MINIMUM OF R-6.5.
- AN ENERGY CALCULATION VERIFYING OVERALL ENVELOPE COMPLIANCE SHALL BE PROVIDED IF ANY ONE OF THE 17 EXTERIOR ENVELOPE COMPONENTS LISTED ABOVE IS NOT MET.

# DOORS, WINDOWS AND VENTILATION:

# ALL WINDOW NUMBERS REFER TO WINDOWS

WINDOW AND DOOR VALUES SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 100-2001, AND LABELED OR CERTIFIED BY THE MANUFACTURER, OR SHALL BE ASSIGNED THE U-VALUES LISTED IN THE INTERNATIONAL ENERGY CONSERVATION CODE TABLES 102.5.2(1) AND 102.5.2(2).

PER SECTION 310.6 - ALL BASEMENTS WITH A HABITABLE AREA. BASEMENTS WITH A BATHROOM OR ROUGH IN PLUMBING FOR A FUTURE BATHROOM, AND EACH BEDROOM MUST HAVE ONE WINDOW FOR EMERGENCY ESCAPE MEETING THE FOLLOWING MINIMUMS. MAXIMUM HEIGHT TO BOTTOM OF CLEAR OPENING - 44"

- MINIMUM CLEAR OPENING WIDTH 20" MINIMUM NET CLEAR OPENING HEIGHT - 24'
- MINIMUM NET CLEAR OPENING AREA 5.7 SQ. FT. (THE NET CLEAR OPENING DIMENSION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE WINDOW FROM THE INSIDE.) EXCEPTION: GRADE FLOOR WINDOWS ARE PERMITTED TO HAVE A MINIMUM NET CLEAR OPENING OF 5.0 SQ. FT.

PER SECTION N1101.3.2 - WINDOW AND DOOR U-VALUES SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 100-2001, AND LABELED OR CERTIFIED BY THE MANUFACTURER, OR SHALL BE ASSIGNED THE U-VALUES LISTED IN THE INTERNATIONAL ENERGY CONSERVATION CODE TABLES 102.5.2 AND 102.5.2(2).

ROOF/CEILING - WOOD FRAME WALLS & BAND JOISTS/BOARDS - FLOOR OVER UNHEATED CRAWL SPACE -CONCRETE/MASONRY BASEMENT FOUNDATION - WALLS FOR FINISHED BASEMENT AREAS CONCRETE/MASONRY BASEMENT FOUNDATION - WALLS FOR UNFINISHED BASEMENT AREAS EXCEPTIONS: UNFINISHED BASEMENTS MAY HAVE UP TO A MAXIMUM OF 20% OF THE TOTAL BASEMENT WALL AREA EXPOSED ABOVE THE OUTSIDE FINISHED GRADE/GROUND LEVEL AS UN-INSULATED CONCRETE FOUNDATION WALLS. THE FOUNDATION WALL AREA ABOVE THE OUTSIDE GRADE/GROUND LEVEL THAT MAY BE UN-INSULATED IS DETERMINED BY THE FORMULA .20 TIMES THE BASEMENT WALL HEIGHT OF ALL WALLS (INC LUDING INSULATED EXTERIOR FRAME WALLS FOR WALK-OUT BASEMENTS AND WALLS COMMON TO BOTH BASEMENT AND ATTACHED GARAGES) TIMES THE PERIMETER OF THESE BASEMENT WALLS. IN UNFINISHED AREAS THE BASEMENT FOUNDATION WALL INSULATION SHALL EXTEND DOWN TO THE BASEMENT FLOOR SLAB OR TO A MINIMUM OF 24 INCHES BELOW OUTSIDE FINISHED GRADE WHEN THE GRADE IS ABOVE THE FLOOR SLAB ELEVATION.

### SLAB-ON-GRADE FLOORS MIN, R-4.2 (UNHEATED SLAB)

MIN R-6.2 (HEATED SLAB) NOTE: THE INSULATION SHALL BE ALONG THE PERIMETER OF THE FOUNDATION WALL DOWNWARD FROM THE SLAB A MINIMUM DISTANCE OF 24" OR HORIZONTALLY UNDER THE SLAB FOR A MINIMUM OF 24" OR HORIZONTALLY UNDER THE SLAB FOR A MINIMUM OF 24". SLABS WITH DUCTWORK BELOW ARE CONSIDERED HEATED SLABS.

METAL DOORS, EXCEPT OVERHEAD GARAGE DOORS, SHALL BE INSULATED.

# SKYLIGHTS SHALL BE DOUBLE GLAZED.

7.

10.

11.

13

15.

16.

18.

19.

20.

22.

- WINDOWS FOR NATURAL VENTILATION OF UNFINISHED BASEMENTS MAY BE SINGLE GLAZED. ALL OTHER WINDOWS SHALL COMPLY WITH ONE OF THE FOLLOWING: WINDOW AREAS < 24% OF GROSS INSULATED FRAME WALL AREA (ENTIRE BUILDING):
- DOUBLE GLAZED WITH 1/2" MINIMUM CLEAR GLASS (OVERALL THICKNESS) IN EITHER VINYL, WOOD, FIBERGLASS OR ALUMINUM W/THERMAL BREAK FRAMES, OR; WINDOW WITH MAX, OVERALL U VALUE OF 0.56.
- WINDOW AREAS > 24% < 30% OF GROSS INSULATED FRAME WALL AREA (ENTIRE BUILDING). PROVIDE ONE OF THE FOLLOWING DOUBLE GLAZED WITH 1/2" MINIMUM CLEAR GLASS (OVERALL THICKNESS) IN EITHER VINYL, WOOD, FIBERGLASS OR ALUMINUM W/THERMAL BREAK FRAMES, PLUS ONE OF THE FOLLOWING: WINDOWS TREATED W/ LOW-E FILM, OR;
- EXTERIOR WALLS W/MIN. 1/2' INSULATED SHEATHING WITH A MINIMUM R VALUE OF 3. WINDOWS WITH MAX. U VALUE OF 0.51

AN ENERGY CALCULATION VERIFYING COMPLIANCE SHALL BE PROVIDED IF WINDOW AREAS EXCEED 30% OF THE GROSS INSULATED FRAME WALL AREA FOR THE ENTIRE BUILDING OR IF ANY PART OF THE STRUCTURE HAS INSULATION WITH LESS THAN THE MINIMUM ALLOWABLE R VALUE. NOTES: WINDOW AREA SHALL INCLUDE GLASS AREA. WINDOW FRAME, MULLIONS, MUNITIONS, ETC.

- DOOR AREA SHALL BE CONSIDERED AS WALL AREA WHEN THE UR VALUE IS LESS THAN OF EQUAL TO 0.6. WHERE THE UR VALUE FOR A DOOR IS GREATER THAN 0.6. THEN 50% OF THE DOOR AREA SHALL BE CONSIDERED AS WINDOW AREA
- WINDOWS FOR NATURAL VENTILATION OF UNFINISHED BASEMENTS MAY BE SINGLE GLAZED. INSULATED WALL SHEATHING IN ADDITION TO CAVITY INSULATION
- APPLIES TO ALL ABOVE GRADE WOOD FRAME WALLS INCLUDING BASEMENT WALLS AND BOARD

PROVIDE LAMINATED SAFETY GLASS FULLY TEMPERED GLASS OR APPROVED SHATTER RESISTANT PLASTIC IN ALL DOORS HAVING GLAZING AND AT GLAZED OPENINGS ADJACENT TO DOOR IF THE NEAREST VERTICAL EDGE OF THE GLAZING MATERIAL IS WITHIN A 24" AREA OF EITHER CRITICAL EDGE OF A DOOR IN A CLOSED POSITION AND IF THE BOTTOM EDGE OF THE GLAZING MATERIAL IS LESS THAN 60 INCHES ABOVE THE FLOOR.

GLASS IN SHOWER DOOR AND ENCLOSURES SHALL BE FULLY TEMPERED OR LAMINATED SAFETY GLASS.

LOCKS WITH THUMB TURNS ON THE INSIDE ARE PERMITTED. INSIDE KEY OPERATION IS PERMITTED PROVIDED THE KEY CANNOT BE REMOVED FROM THE LOCK WHEN LOCKED FROM THE INSIDE

ALL EXTERIOR DOORS IN EXCESS OF 24" ABOVE GRADE ARE TO BE SECURED CLOSED AND BARRICADED BEFORE FINAL INSPECTION IF DECK OR STAIR IS NOT IN PLACE. DOOR MAY BE OPENED AFTER A PERMIT IS ISSUED AND FINAL INSPECTION OF DECK OR STAIR IS MADE.

- SAFETY GLAZING IS REQUIRED FOR FIXED OR OPERABLE PANELS THAT MEET ALL OF THE FOLLOWING TYPE II CATEGORY AND NOTED ON ARCHITECTURAL PLANS
- INDIVIDUAL PANE GREATER THAN 9 SQ. FT. BOTTOM EDGE LESS THAN 18" ABOVE FLOOR
- TOP EDGE MORE THAN 36" ABOVE FLOOR WALKING SURFACE WITHIN 36" HORIZONTALLY

GLASS AREA IN HABITABLE ROOMS SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA SERVED. ONE-HALF OF THIS AREA MUST BE AVAILABLE FOR UNOBSTRUCTED VENTILATION WITH SCREENS INCLUDED.

PER SECTION 408.2 - ATTIC AND ENCLOSED RAFTER SPACE TO HAVE VENTILATION (NET FREE AREA) AT LEAST 1/150 OF THE AREA SERVED AT LEAST TWO REMOTE VENTS ARE REQUIRED FOR EACH AREA. WHERE, RIDGE OF GABLE VENTS ARE USED. 1/2 OF THE VENT AREA IS TO BE PROVIDED BY THE RIDGE OR GABLE VENTS AND 1/2 BY THE EAVE OR CORNICE VENTS. THE REQUIRED VENT AREA MAY BE VENTS ARE LOCATED IN THE UPPER 1/3 OF THE ATTIC OR ENCLOSED RAFTER SPACE.

PER SECTION 408.2 - FOUNDATION CRAWL SPACES TO HAVE A MINIMUM CLEARANCE OF AT LEAST 18" AND SHALL BE PROVIDED WITH VENT OPENINGS WITHIN 3' OF EACH CORNER (LOCATED ON OPPOSITE SIDES. THE VENT AREA SHALL BE AT LEAST 1/150 OF THE AREA SERVED. IF AN APPROVED VAPOR BARRIER IS PROVIDED OVER THE SURFACE OF THE GROUND THE REQUIRED AREA OF VENTILATION MAY BE REDUCED TO 1/1500 OF THE AREA SERVED AND THE VENTS SHALL HAVE OPERABLE LOUVERS

- SKYLIGHTS: SINGLE LIGHT AND MULTIPLE LIGHTS SHALL CONSIST OF ONE OF THE FOLLOWING: LAMINATED GLASS WITH 30 MIL POLYVINYL BUTYRYL INTER LAYER OR WIRE GLASS, OR APPROVED PLASTIC, OR HEAT STRENGTHENED, OF FULLY TEMPERED GLASS. SCREENS ARE REQUIRED TO BE INSTALLED BELOW SINGLE LIGHTS OF HEAT STRENGTHENED AND FULLY
- TEMPERED GLASS, SCREENS SHALL BE INSTALLED BELOW MULTIPLE LIGHTS WHICH CONTAIN HEAT STRENGTHENED GLASS. FULLY TEMPERED GLASS AND WIRE GLASS AS THE BOTTOM LAYER. SCREENS SHALL BE NOT MORE THAN 4" BELOW THE GLASS, NOT LESS THAN 12 GAGE, NOT LARGER THAN 1" X 1" MESH, AND SHALL BE DESIGNED TO SUPPORT THE WEIGHT OF THE GLASS.

PER SECTION 308.4 - ALL BEDROOMS MUST HAVE ONE WINDOW FOR EMERGENCY ESCAPE MEETING THE FOLLOWING: MAXIMUM HEIGHT FROM FLOOR TO BOTTOM OF CLEAR OPENING 44". MINIMUM CLEAR OPENING HEIGHT 24".

- MINIMUM CLEAR OPENING WIDTH 20". MINIMUM CLEAR OPENING AREA 5.7 SQ. FT. WINDOWS ABOVE GRADE.
- MINIMUM CLEAR OPENING AREA 5.0 SQ. FT. WINDOWS AT GRADE. THE NET CLEAR OPENING DIMENSIONS SHALL BE OBTAINED BY THE OPERATION OF THE WINDOW FROM THE INSIDE

# PER SECTION 309.2

1/2" GYPSUM BOARD ON GARAGE SIDE OF THE COMMON HOUSE/GARAGE WALL(S) UP TO THE UNDERSIDE OF THE ROOF SHEATHING. OR UP TO A GYPSUM BOARD GARAGE CEILING. CEILIINGS/FLOOR SEPARATING GARAGE FROM DWELLING SHALL BE PROTECTED WITH 5/8" TYPE X DRYWALL. WALLS SEPARATING GARAGE FROM DWELLING SHALL BE PROTECTED WITH 5/8" TYPE X DRYWALL.

ALL BEARING WALLS, BEAMS, AND COLUMNS SUPPORTING THE FLOOR/CEILING ASSEMBLY MUST BE PROTECTED WITH 1/2" DRYWALL

PER SECTION 311.4.1 - MINIMUM SIZE HOUSE ENTRY DOOR SHALL BE 36" WIDTH. MINIMUM WIDTH SHALL BE PROVIDED BY A SINGLE LEAF IN DOUBLE LEAF DOORS.

# NOTE:

ALL EXTERIOR FRAMING TO COMPLY W/ 602.10 FULLY SHEATH ENTIRE BUILDING W/ 7/16" PLYWOOD OR OBC STRUCTURAL PANELS. UTILIZE NARROW WALL BRACING METHOD @ GARAGE DOOR OPENINGS AND @ PANELS LESS THAN 4'-0" WIDE PER 602.10.10.3 (SEE ATTACHED DETAILS).

CER THIS AND REPI	CERTIFICATION #: 200600 THIS DRAWING AND DETAILS ON TAN INSTRUMENT OF SERVICE, IS PROPERTY OF THE ARCHITECT AND BE USED FOR THIS SPECIFIC PRO. AND SHALL NOT BE LOANED, COPIE REPRODUCED WITHOUT THE CONS OF THE ARCHITECT.			
Swadanar Racidanca - Kitchan	Expansion	6330 Washington Ave. University City. MO 63130		
	Description			
DA REVISIONS	Date Date	10/18/2023 NO: 23.034		
Ste		CATIONS		

Checke

CC	DDE BLOCK - COMPLY WITH: 2018 IRC /	201	18 IBC / 2018 IEBC / 2018
<u>FINISHI</u> 1	ES: PER SECTION R315 - MAXIMUM ELAMESPREAD RATING ON ALL INTERIOR EINISH MATERIALS SHALL NOT EXCEED 200	ELEC <sup>T</sup>	
1.	OR SMOKE DEVELOPMENT OF 450 MAX.	2.	PROVIDE A 200 AMP (UNLESS OTHERWISE NOTED) ELECTRIC PANEL
2.	PER SECTION R803.2.3 - DRYWALL INSTALLATION SHALL BE IN CONFORMANCE WITH THE GYPSUM ASSOCIATION RECOMMENDED PRACTICE FOR THICKNESS. NAILING AND TAPING ON CORRECT STUD SPACING UNLESS SUPERSEDED BY LOCAL CODE REQUIREMENTS	3	
3.	ALL FIRE RATED DRYWALL ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS OF THE	5.	DETECTORS ON ALL LEVELS IN THE VICINITY OF ALL BEDROOM ENT LOCATED BEDROOM HALFWAY DETECTOR UPSTREAM FROM OF NE
4.	APPROVED TEST ASSEMBLY. WATER RESISTANT GYPSUM BACKER BOARD SHALL BE USED IN BATHTUB AND SHOWER COMPARTMENTS. U.N.O. DUROCK OR EQUAL SHALL BE USED WHEN CERAMIC TILE IS SPECIFIED. NO VAPOR BARRIER BEHIND BACKER		CONTAIN BEDROOMS SHALL HAVE THE DETECTOR LOCATED AT THE RESIDENCES A SMOKE DETECTOR INSTALLED ON THE UPPER LEVE PROVIDED THE LOWER LEVEL IN LESS THAN ONE FULL STORY BELC SO THAT AN ALARM WILL SOUND THROUGHOUT THE DWELLING SIM
5.	BOARD. PER SECTION 316.1 - BATT OR BLANKET INSULATION INCLUDING THE VAPOR RETARDER, BREATHER PAPER OR OTHER COVERINGS SHALL NOT BE LEFT EXPOSED IN UNFINISHED BASEMENTS UNLESS THE MATERIAL HAS A FLAME SPREAD PATING OF 25 OR LESS AND A SMOKE DEVELOPMENT PATING OF 450 OR LESS	4.	INSTALLATION SHALL MEET NFPA 72-99. ELECTRIC PANELS: A. CIRCUIT BREAKER PANELS SHALL NOT BE INSTALLED IN BE B. LIGHTING IS REQUIRED IN THE VICINITY OF THE ELECTRIC
6.	CEILINGS SUPPORTED BELOW WOOD JOISTS OR ATTACHED DIRECTLY TO WOOD FLOOR TRUSSES SHALL BE DRAFT- STOPPED AT 500 S.F. INTERVALS AND PARALLEL TO FRAMING MEMBERS. (FINISHED BASEMENT CEILINGS).		C. ELECTRIC PANELS IN NEW CONSTRUCTION SHALL NOT BE D. A MINIMUM OF 3' CLEARANCE IS REQUIRED IN FRONT OF P.
7.	ALL SOFFITS AND DROPPED CEILINGS SHALL BE FIRE BLOCKED.	5.	
8.	SHOWER FLOOR SURFACES TO BE SMOOTH, NONCORROSIVE, NONABSORBENT AND WATERPROOF MATERIAL.	6. 7	ELECTRIC RANGES AND/OR ELECTRIC DRYERS REQUIRE 3-POLE CIP
9.	SHOWERS AND BATH/SHOWER ENCLOSURES SHALL HAVE WALLS CONSTRUCTED OF SMOOTH, NONCORROSIVE, NONABSORBENT, AND WATERPROOF MATERIAL TO A HEIGHT OF NOT LESS THAN 6'-0" ABOVE THE ROOM FLOOR LEVEL.	7.	WITH NO PLACE ALONG WALLS IN UNFINISHED BASEMENT AREAS SI WITH NO PLACE ALONG WALL TO BE MORE THAN 6'-0" FROM AN OUT LOCATIONS & SPACING OF OTHER RECEPTACLES AND SWITCHES.
FURNIS	SHINGS:	8.	RECEPTACLES SHALL NOT BE INSTALLED WITHIN A BATHTUB OR SH AND CEILING FANS SHALL NOT BE INSTALLED WITHIN 3'-0" HORIZON EDGE OF THE TUB AND 8'-0" VERTICALLY FROM THE TOP OF THE TU
1.	CABINET SUPPLIER SHALL MEASURE AREA OF WORK AFTER ROUGH FRAMING TO ASSURE EXACT FIT OF CABINETS.	9.	EXTERIOR WOOD STUD WALLS IN UNFINISHED BASEMENT AREAS SI WITH NO PLACE ALONG WALL TO BE MORE THAN 6'-0" FROM AN OUT LOCATIONS & SPACING OF OTHER RECEPTACLES AND SWITCHES.
HVAC:		10.	RECEPTACLES SHALL NOT BE INSTALLED WITHIN A BATHTUB OR SH AND CEILING FANS SHALL NOT BE INSTALLED WITHIN 3'-0" HORIZON
1.	PER SECTION 408.2 - THE TOTAL VENT AREA SHALL BE AT LEAST 1/150 OF THE AREA SERVED. EXCEPTIONS:		EDGE OF THE TUB AND 8'-0" VERTICALLY FROM THE TOP OF THE TU
	REQUIRED VENT AREA MAY BE REDUCED TO 10% OF THE ABOVE AND THE VENTS MAY HAVE OPERABLE LOUVERS. B. CLEAR HEIGHT MAY BE REDUCED WHEN PRESERVATIVE-TREATED OR NATURALLY DURABLE	11.	IF THE UNDERGROUND METAL WATER PIPE IS USED AS THE GROUN THE PIPE WITHIN 5 FEET OF THE POINT OF BUILDING ENTRANCE. SI PROVIDED PER NEC 250-50 OR 250-53.
2.	ENCLOSED ATTIC, RAFTER AND CRAWL SPACE AREAS MAY BE VENTILATED BY A MECHANICAL EXHAUST AND SUPPLY AIR SYSTEM OF .02 CFM/SQ. FT. OF HORIZONTAL AREA. THE VENTILATION SYSTEMS SHALL OPERATE CONTINUOUSLY.	12.	INTERIOR STAIRWAYS SHALL HAVE ILLUMINATED LIGHTING CONTRO OPERABLE FROM THE TOP AND BOTTOM OF THE STAIRWAY WITHOU STAIRWAYS TO BE PROVIDED WITH A MINIMUM OF 10 FOOT-CANDLE STAIRWAYS TO HAVE A MINIMUM OF 1 FOOT-CANDLE MEASURED OF CONTROL ED BY A SWITCH INSIDE THE DWFLLING OR AUTOMATICA
3.	THERMOSTATS USED FOR HEATING AND COOLING SHALL BE CAPABLE OF BEING SET FROM 55 DEGREES F. TO 85 DEGREES F. AND SHALL BE CAPABLE OF OPERATING THE SYSTEM'S HEATING AND COOLING SEQUENCE.	13.	CONTINUOUSLY OPERATED.
4.	ALL HVAC EQUIPMENT AND DUCTWORK SHALL COMPLY WITH THE 2018 INTERNATIONAL MECHANICAL	14.	PER SECTION 210-52 - RECEPTACLES ARE REQUIRED TO BE INSTAL
5.	CODE. DRYER SHALL VENT TO EXTERIOR AND BE INDEPENDENT OF ALL OTHER SYSTEMS. AND SHALL HAVE 4" MINIMUM ROUND SMOOTH DUCT.		RECEPTACLE. ALL WALL SPACES 2'-0" WIDE OR GREATER F DOORS, FIXED ROOM DIVIDERS SUCH AS FREE STANDING IN THE 6"-0" MEASUREMENT.
6.	HVAC CONTRACTOR SHALL SIZE HEATING AND COOLING UNITS.		C. KITCHEN AND DINING AREA COUNTER TOP RECEPTACLES CIRCUITS. RECEPTACLES SHALL BE INSTALLED SO THAT N
7.	GAS HEATING SHALL BE USED FOR FURNACES AND HOT WATER HEATERS UNLESS OTHERWISE NOTED.		RECEPTACLE. ALL COUNTER TOP AREAS 12" WIDE OR GRE REFRIGERATORS SHALL BE PROVIDED WITH RECEPTACLE
8.	<ul> <li>PER SECTION 303.3</li> <li>A. BATHROOMS WITHOUT WINDOWS FOR NATURAL VENTILATION SHALL EXHAUST 50 CFM MINIMUM TO THE EXTERIOR. IT IS NOT PERMISSIBLE TO DISCHARGE EXHAUST TO THE ATTIC.</li> <li>a. EXCEPTION: HALF-BATHS WITHOUT A TUB OR SHOWER MAY EXHAUST TO THE ATTIC.</li> <li>B. KITCHENS SHALL HAVE AIR EXHAUST TO THE OUTDOORS.</li> <li>a. KITCHEN RANGE HOODS: A 100 CFM FAN. (INTERMITTENT USE) OR A FAN CONTINUOUSLY EXHAUSTING 20 CFM SHALL BE INSTALLED.</li> <li>b. KITCHEN RANGES WITHOUT HOODS: NATURAL VENTILATION SHALL BE SUPPLIED THROUGH OPERABLE WINDOWS, WITH A MINIMUM VENT OF 4% OF THE FLOOR AREA BEING SERVED</li> </ul>		<ul> <li>WORK-SURFACE ARE PROHIBITED. AT LEAST ONE RECEPT PENINSULA COUNTER SPACE THAT IS 24" X 12" OR GREATE</li> <li>D. IN BATHROOMS AT LEAST ONE WALL MOUNTED RECEPTACE</li> <li>OUTDOOR RECEPTACLES (WEATHER-PROOF TYPE) INSTAL ACCESSIBLE TO GRADE LEVEL AND NOT MORE THAN 6'-6" /</li> <li>F. AT LEAST 1 RECEPTACLE IN L AUNDRY AREA SUPPLIED BY</li> <li>G. AT LEAST 1 RECEPTACLE IN UNFINISHED BASEMENT AREA RECEPTACLE.</li> <li>H. REQUIRED RECEPTACLE OUTLETS LOCATED IN FLOORS SI AND SHALL BE INSTALLED IN BOXES LISTED FOR THE PURF</li> </ul>
9.	CHIMNEYS AND FLUES (MASONRY AND METAL) SHALL EXTEND A MINIMUM OF 3'-0" ABOVE THE ROOF	15.	PER SECTION 210.70 - LIGHTING IS REQUIRED IN THE FOLLOWING AI A. AT LEAST 1 WALL SWITCHED LIGHTING OUTLET SHALL BE I
10.	PENETRATION. APPROVED VENT SYSTEMS FOR APPLIANCES SHALL BE INSTALLED AND TERMINATED PER		HALLWAY, STAIRWAY, ATTACHED GARAGE, DETACHED GAR DOORS. OCCUPANCY SENSORS MAY BE USED IN ADDITION
11.	MANUFACTURER'S INSTRUCTIONS. UNDERGROUND DUCT WORK SHALL CONFORM TO ASTM D1784 AND D2412.		B. AT LEAST 1 LIGHTING OUTLET AND ONE RECEPTACLE ARE UTILITY ROOM THAT IS USED FOR STORAGE OR CONTAINS REQUIRING SERVICING. THE LIGHT SWITCH SHALL BE LOC
		16.	PER SECTION 250-140 - RECEPTACLE OUTLETS FOR RANGES AND C
<u>1.</u>	LEAD FREE SOLDER IS REQUIRED ON ALL COPPER WATER SUPPLY PIPING.	17.	LIGHTING IN CLOTHES CLOSETS:
2.	PROVIDE CONTINUOUS DRAINAGE TO SUMP OR "DAYLIGHT" UNDER BASEMENT FLOOR SLAB. SUMPS MUST BE 15" DIAMETER (MINIMUM X 18" DEEP WITH A FITTED COVER.		<ul> <li>A. THE USE OF INCANDESCENT FIXTURES WITH OPEN OR ON PENDANT FIXTURES ARE PROHIBITED.</li> <li>B. FIXTURES MAY BE LOCATED ONLY WHERE THERE ARE THE POINT OF STORAGE SPACE:</li> </ul>
3.	A FLOOR DRAIN IS REQUIRED FOR A WATER HEATER AND WITHIN 15 FEET AND IN THE SAME ROOM.		a. SURFACE MOUNTED INCANDESCENT FIXTURES - b. SURFACE MOUNTED FLUORESCENT FIXTURES AN
4.	GAS PIPING SHALL BE IDENTIFIED AT INTERVALS OF NO MORE THAN 5 FEET IN EXCEPTION BLACK STEEL PIPE NEED NOT BE LABELED.		
5.	PER SECTION 2420.5 - EVERY GAS APPLIANCE SHALL HAVE AN INDIVIDUAL SHUTOFF VALVE AND GROUND JOINT UNION. A SEDIMENT TRAP IS REQUIRED AT EACH APPLIANCE OR GROUP OF APPLIANCES.		
6.	THE WATER SERVICE PIPE AND THE BUILDING SEWER TO BE A MINIMUM OF 10' APART HORIZONTALLY.		
7.	GAS PIPE SHALL ENTER BUILDING ABOVE GRADE OR BE IN A PROTECTIVE SLEEVE OR OTHERWISE BE PROTECTED AGAINST CORROSION.		
8.	PROVIDE A COLD WATER HOSE BIB WATER SERVICE ENTRANCE.		
9.	SUMP PUMP DISCHARGE AND ROOF DRAINAGE SHALL BE PIPED TO A STORM DRAIN OR TO AN APPROVED WATER COURSE. DISCHARGING TO OR WITHIN 10" OF A SIDEWALK, DRIVEWAY, STREET, OR TO CREATE A NUISANCE TO ADJOINING PROPERTIES IS PROHIBITED.		
10.	PER SECTION 1001.7 - DOWNSPOUTS, BASEMENT AREA WAY DRAINS OR FOUNDATION DRAIN TILES AREA NOT TO BE CONNECTED TO A SANITARY SEWER.		
11.	WATER SERVICE LINE TO BE SIZED ACCORDINGLY PER 2018 INTERNATIONAL PLUMBING CODE.		

# 2018 IPC / 2018 IMC / 2018 IFGC / 2018 IECC

TERNATIONAL BUILDING CODES STANDARDS AND REQUIREMENTS. ECTRIC PANEL IN THE BASEMENT WITH A 110 V. GFI DUPLEX

### H BATTERY BACKUP INTERCONNECTED AND U.L. APPROVED SMOKE BEDROOM ENTRANCE DOORS (HALLWAY) AND WITHIN EACH BEDROOM. M FROM OF NEAR RETURN AIR GRILLE. FLOOR LEVELS THAT DO NOT OCATED AT THE CEILING NEAR THE STAIRWAY. IN SPLIT LEVEL HE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL ULL STORY BELOW THE UPPER LEVEL. CONNECT ALL SMOKE DETECTORS DWELLING SIMULTANEOUSLY SEE PLANS FOR LOCATIONS. THE

WELLING SIMULTANEOUGET SEET EANOTON COURTONS. THE

### ISTALLED IN BEDROOMS OR CLOTHES CLOSETS. THE ELECTRIC PANEL.

SHALL NOT BE INSTALLED IN AREAS WITH LESS THAN 6'-6" HEADROOM. N FRONT OF PANELS

NGS OR ATTICS SHALL BE TYPE "I.C.".

JIRE 3-POLE CIRCUIT BREAKER WITH GROUND TYPE RECEPTACLES. MENT AREAS SHALL HAVE GFI RECEPTACLES AT 12'-0" O.C. MAXIMUM "FROM AN OUTLET. SEE FLOOR PLANS OR ELECTRICAL PLANS FOR

ATHTUB OR SHOWER SPACE. HANGING FIXTURES, TRACK LIGHTING I 3'-0" HORIZONTALLY OF A BATHTUB, MEASURED FROM THE OUTSIDE TOP OF THE TUB RISE.

MENT AREAS SHALL HAVE GFI RECEPTACLES AT 12'-0" O.C. MAXIMUM " FROM AN OUTLET. SEE FLOOR PLANS OR ELECTRICAL PLANS FOR ID SWITCHES.

BATHTUB OR SHOWER SPACE. HANGING FIXTURES, TRACK LIGHTING N 3'-0" HORIZONTALLY OF A BATHTUB, MEASURED FROM THE OUTSIDE TOP OF THE TUB RISE.

AS THE GROUNDING ELECTRODE, THE CONNECTION MUST BE MADE TO ENTRANCE. SUPPLEMENTAL GROUNDING ELECTRODE SHALL BE

HTING CONTROL A T EACH FLOOR LEVEL. SWITCHES MUST BE IRWAY WITHOUT TRAVELING ANY STEP OF THE STAIRWAY. INTERIOR FOOT-CANDLES MINIMUM EVERY TREAD NOSING. EXTERIOR MEASURED ON THE TREAD RUNS. EXTERIOR STAIRWAY LIGHTING R AUTOMATICALLY ACTIVATED WITH A MANUAL OVERRIDE OR

EDROOMS MUST BE ARC-FAULT PROTECTED.

D TO BE INSTALLED IN THE FOLLOWING AREAS: DOMS SO THAT NO SPACE ALONG A WALL IS MORE THAN 6'-0" FROM A E OR GREATER REQUIRE RECEPTACLES. FIXED PANELS OF GLASS REE STANDING BAR-TYPE COUNTERS OR RAILINGS SHALL BE INCLUDED

### (FOYER IS AN ENTRY HALLWAY.) RECEPTACLES SHALL BE SUPPLIED BY AT LEAST 2 DIFFERENT 20 AMP LED SO THAT NO POINT ALONGTHE COUNTER IS MORE THAN 24" FROM A WIDE OR GREATER SEPARATED BY SINKS, RANGES OR RECEPTACLES. RECEPTACLES INSTALLED FACE-UP IN COUNTER ONE RECEPTACLE SHALL BE INSTALLED TO SERVE EACH ISLAND OR

12" OR GREATER. ED RECEPTACLE INSTALLED WITHIN 36" OF EACH BASIN. F TYPE) INSTALLED AT THE FRONT AND BACK OF THE HOUSE, BE THAN G & AROVE THE CRADE LEVEL

ORE THAN 6'-6" ABOVE THE GRADE LEVEL. A SUPPLIED BY A DEDICATED 20 AMPERE BRANCH CIRCUIT. ASEMENT AREAS AND THE GARAGE IN ADDITION TO THE LAUNDRY

IN FLOORS SHALL BE WITHIN 18" OF WALL OR FIXED ROOM DIVIDER FOR THE PURPOSE.

FOLLOWING AREAS: LET SHALL BE INSTALLED IN EVERY HABITABLE ROOM, BATHROOM, DETACHED GARAGE (WITH ELECTRICAL POWER) AND AT EXTERIOR ED IN ADDITION TO A WALL SWITCH OR BE EQUIPPED WITH A MANUAL MARY WALL SWITCH LOCATION. EPTACLE ARE REQUIRED IN EACH ATTIC, CRAWL SPACE, BASEMENT OR OR CONTAINS HEATING, AIR-CONDITIONING OR OTHER EQUIPMENT SHALL BE LOCATED AT THE POINT OF ENTRY.

ANGES AND CLOTHES DRYERS MUST BE A 3-POLE WITH GROUND TYPE.

OPEN OR ONLY PARTIALLY ENCLOSED LAMPS AND THE USE OF

NT FIXTURES - 12" MINIMUM. IT FIXTURES AND RECESSED FIXTURES - 6" MINIMUM.

CER THIS AND REPT	TIFICA BORAWIN INSTRUM PERTY OU SEALL NO RODUCE OF	ATION NG ANE MENT C F THE A R THIS OT BET THE AF		DEFECTS   FEELER, S. ARCHITECTS		Separation         ST. LOUIS, MO 63122           Ingo 20 and 10	
Swadanar Racidanca - Kitchan				6330 Washington Ave.		University City. MO 63130	
SNOISIAN DA PR	M units of the Description		1 NO	0/1 ::	8/2	2023	33
DR CH SHE	SPEC AWN ECK			тіс с 7	DN Au he	S tho cke	r r

NOTE:

ALL EXTERIOR FRAMING TO COMPLY W/ 602.10 FULLY SHEATH ENTIRE BUILDING W/ 7/16" PLYWOOD OR OBC STRUCTURAL PANELS. UTILIZE NARROW WALL BRACING METHOD @ GARAGE DOOR OPENINGS AND @ PANELS LESS THAN 4'-0" WIDE PER 602.10.10.3 (SEE ATTACHED DETAILS).

PERMIT DOCUMENTS 10/18/2023

![](_page_24_Figure_0.jpeg)