> YKK AP AMERICA INC.
> SERIES YHS 50 FI STOREFRONT OUTSIDE GLAZED - HVHZ IMPACT RATED

1. SEE SHEET $15 \& 16$ FOR ANCHOR TYPE REQUREMENTS, MINIMUM EMBEDMENTS, AND MINIMUM EDGE DISTANCES. ALL ANCHOR
REOUIREMENTS MUST BE ADHERED ANCHOR REQUIREMENTS REQURES SEEARATE EVALUATION AND APPROVAL.
2. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION ShOWN.
3. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUMTNUMEE OF ANCHORS TO BE USED FOR PRODUC INSTALATION.
4. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF $\pm 1 / 2$ INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE
5. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM (S). MAXIMUM ALLOWABLE SHIM STACK TO BE 3/8 SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
6. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WAL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRIC
7. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE Stant Material or have a CORROSION RESISTANT COATING.
8. FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURD
g. ntallationanchors shall
9. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED THE ANCHOR MANUFACTURER.
10. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE bASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING BASED
PRORTIES:
A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55 .
B. CONCRETE -MINIMUM COMPRESSIVE STRENGTH OF 3000 PS
C. WITH MIN. COMPRESSIVE STRENGTH OF 2000 PSI AND GROU CONFORMS TO ASTM C 476, MIN. GROUT COMPRESSIVE STRENGTH OF 2000 PSI.
D. STEEL - MINIMUM YIELD STRENGTH OF 36 KSI. MINIMUM 12

GA. WALL IHIIKNESS
E. STEEL - MINIMUM YIELD STRENGTH OF 36 KSI. MINIMUM 1818 GA. WALL THICKNESS WITH $2 \times$ WOO

GA. WALL THICKNESS WITH 2 X WOOD BACKING.
ALUMINUM - MINIMUM $1 / 8$ INCH THICK 6063 -T5 ALUMINUM

## GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BULLING CODE (FBC), INCLUDING HVHZ AND HAS BEEN

- TAS 201-94
- TAS 203-94
- AAMA 501-05
- ASTM E1996-06

2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X FRAMING AND METAL STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION
3. 1 X AND $2 \times$ BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE
STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE
DOCUMENTS FOR USE WITH THIS DOCUMENT.
5. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE. SEE
6. STOREFRONT FRAME MATERIAL: ALUMINUM 6063-T5
7. ALL STRUCTURAL MATERIALS \& DISSIMILAR METALS SHALL BE PROTECTED, TREATED, PAINTED, COATED, AND/OR ISOLATED AS REQUIRED IN THE APPLICABLE SECTIONS OF THE CURRENT FLORIDA BUILDING CODE AND REFERENCED DESIGN
SPECIIICATIONS
8. GLASS MEETS THE REQUIREMENTS OF ASTM E 1300 GLAS CHARTS. SEE SHEETS 3 , 4 \& 5 FOR GLAZING DETAILS.

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INSTRUCTIONS FOR USE:

1. DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG, HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD. OF DESIRED GLASS SIZE
2. CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGH USING CHARTS ON SHEETS $6,7,8,9 \& 10$ FOR STORE FRONT CAPACITY SHOULD EXCEED THE DESIGN LOAD
3. USING CHART ON SHEET 11 \& 12 SELECT ANCHOR OPTION WITH design rating More than design load specified in step 1
THE LOWEST VaLUe ReSulting from step 2, 3 AND 4 Shall APPLY TO ENTIRE SYSTEM


TYPICAL YHS 50 FI STOREFRONT



## GLASS TYPES

## LARGE \＆SMALL MISSILE IMPACT

| GLASS LOAD CAPACITY（PSF） |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DAYLIGHT OPENING（IN） |  | GLASS <br> TYPES D ORE | GLASS | TYPE F | $\begin{gathered} \text { GLASS } \\ \text { TYPES G } \\ \text { ORH } \end{gathered}$ |
| $\begin{array}{\|c\|c\|} \hline \text { DLO } \\ \text { WIDTH } \\ \hline \end{array}$ | $\begin{array}{\|c\|c\|c\|c\|c\|} \hline \text { DEIGT } \end{array}$ | EXT．（＋） <br> INT．（－） | $\begin{gathered} \text { EXT. } \\ (+) \\ \hline \end{gathered}$ | INT． <br> （－） | $\begin{aligned} & \text { EXT. (+) } \\ & \text { INT. (-) } \end{aligned}$ |
| 27.5 | 54.375 | 50.0 | 70.0 | 90.0 | 70.0 |
| 33.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 39.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 45.5 |  | 50.0 | 70.0 | 88.5 | 70.0 |
| 51.5 |  | 44.2 | 70.0 | 78.2 | 70.0 |
| 57.5 |  | 44.2 | 70.0 | 78.3 | 70.0 |
| 63.5 |  | 48.7 | 70.0 | 79.7 | 70.0 |
| 69.5 |  | 41.8 | 68.4 | 68.4 | 68.4 |
| 27.5 | 60.375 | 50.0 | 70.0 | 90.0 | 70.0 |
| 33.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 39.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 45.5 |  | 50.0 | 70.0 | 88.5 | 70.0 |
| 51.5 |  | 44.2 | 70.0 | 78.2 | 70.0 |
| 57.5 |  | 39.6 | 70.0 | 70.0 | 70.0 |
| 63.5 |  | 39.6 | 70.0 | 70.1 | 70.0 |
| 69.5 |  | 43.4 | 70.0 | 73.6 | 70.0 |
| 27.5 | 66.375 | 50.0 | 70.0 | 90.0 | 70.0 |
| 33.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 39.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 45.5 |  | 50.0 | 70.0 | 88.5 | 70.0 |
| 51.5 |  | 44.2 | 70.0 | 78.2 | 70.0 |
| 57.5 |  | 39.6 | 70.0 | 70.0 | 70.0 |
| 63.5 |  | 35.8 | 63.4 | 63.4 | 63.4 |
| 69.5 |  | 35.9 | 63.5 | 63.5 | 63.5 |
| 27.5 | 72.375 | 50.0 | 70.0 | 90.0 | 70.0 |
| 33.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 39.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 45.5 |  | 50.0 | 70.0 | 88.5 | 70.0 |
| 51.5 |  | 44.2 | 70.0 | 78.2 | 70.0 |
| 57.5 |  | 39.6 | 70.0 | 70.0 | 70.0 |
| 63.5 |  | 35.8 | 63.4 | 63.4 | 63.4 |
| 69.5 |  |  | 57.9 | 57.9 | 57.9 |
| 27.5 | 78.375 | 50.0 | 70.0 | 90.0 | 70.0 |
| 33.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 39.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 45.5 |  | 50.0 | 70.0 | 88.5 | 70.0 |
| 51.5 |  | 44.2 | 70.0 | 78.2 | 70.0 |
| 57.5 |  | 39.6 | 70.0 | 70.0 | 70.0 |
| 63.5 |  |  | 63.4 | 63.4 | 63.4 |
| 69.5 |  |  | 57.9 | 57.9 | 57.9 |
| 27.5 | 84.375 | 50.0 | 70.0 | 90.0 | 70.0 |
| 33.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 39.5 |  | 50.0 | 70.0 | 90.0 | 70.0 |
| 45.5 |  | 50.0 | 70.0 | 87.1 | 70.0 |
| 51.5 |  | 44.2 | 70.0 | 78.2 | 70.0 |
| 57.5 |  |  | 70.0 | 70.0 | 70.0 |
| 63.5 |  | － | 63.4 | 63.4 | 63.4 |
| 69.5 |  | － | 57.9 | 57.9 | 57.9 |

1－5／16＂O．A．INSULATED LAMINATED
GLASS CONSISTING OF


1－5／16＂O．A．INSULATED LAMINATED GLASS CONSISTING OF： 1／4＂TEMPERED
1／4＂HEAT STRENGTHENED GLASS， 0．090＂SENTRYGLAS BY KURARAY， FORMERLY KNOWN AS SGP BY DUPONT， 1／4＂HEAT STRENGTHENED GLASS INTERIOR


AZING DETAIL
（DRY GLAZED）


DAYLTE OPENING DIMENSIONS： －NOMINAL PANEL WIDTH－ 2.500 ＂
DAYLITE OPENING HEIGHT： GLASS CAPACITIES ON THIS SHEET ARE BASED ON
ASTM E1300－04（3 SEC．GUSTS）AND CHAPTER 17 OF THE CURRENT FBC FOR SIZES OTHER THAN TESTED．
SETTING BLOCK DUROMETER HARDNESS OF 70－90 （SHORE A）AS REFERENCED IN CHAPTER 24. SETTING BLOCKS TO BE LOCATED AT $1 / 4$ SPAN LENGTH FOR GLASS WIDER THAN 36 ＂AS PER CHAPTER 24.
4．D．L．O．MAY Not EXCEED MAX DIMENSIONS IN


YKK AP AMERICA




DATE：11．18．15

| DWG．BY： | CHK．BY： |
| :---: | :---: |
| SM | HFN |

SCALE：NTS
Dwg．\＃：YKK159

## GLASS TYPES

## LARGE \& SMALL MISSILE IMPACT <br> (CONTINUED)



YKK
Quality
YKK AP AMERICA




## MULLION LOAD TABLES

LIGHT CONFIGURATION


## MULLION LOAD TABLES

MEDIUM CONFIGURATION


YKK AP AMERICA 1229 HWY 441 ByPASs
DUBLIN, GEORCIIA 31021


 DATE: 11.18 .15 | DWG. BY: |  |
| :---: | :---: |
| SMM | CHK. BY: |

SCALE: NTS
DwG. \#: YKK159 SHEET:

## MULLION LOAD TABLES

## HEAVY CONFIGURATION

| DESIGN LOAD CAPACITY - PSF |  |  |  |
| :---: | :---: | :---: | :---: |
| nominaldims. |  | heavy mulion - M3 |  |
| WIDTH (W) | FRAME HEIGHT | EXT. (+) | INT. (-) |
| 72 | 96 | 70.0 | 90.0 |
| 69 | 102 | 70.0 | 90.0 |
| 66 | 108 | 70.0 | 90.0 |
| 63 | 114 | 70.0 | 90.0 |
| 60 | 120 | 70.0 | 90.0 |
| 41 | 126 | 65.0 | 65.0 |
| 39 | 132 | 65.0 | 65.0 |
| 37 | 138 | 65.0 | 65.0 |
| 36 | 144 | 65.0 | 65.0 |

NOTE: HEAVY CONFIGURATION JAMBS ARE
ANCHORED ALONG THEIR LENGTH AND THEREFORE do Not Limit design pressure.


Quality
Ouality
inspires
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## MULLION LOAD TABLES

EXPANSION MULLION

| DESIGN LOAD CAPACITY - PSF |  |  | DESIGN LOAD CAPACITY - PSF |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NOMINAL DIMS. |  | EXPANSION MULLION | NOMINAL DIMS. |  | EXPANSION MULLION |
| WIDTH <br> (W) | frame HEIGHT | EXT. (+) INT. (-) | WIDTH <br> (W) | FRAME HEIGHT | EXT. (+) INT. (-) |
| 30 | 72 | 65.0 | 30 | 90 | 65.0 |
| 33 |  | 65.0 | 33 |  | 65.0 |
| 36 |  | 65.0 | 36 |  | 65.0 |
| 39 |  | 65.0 | 39 |  | 65.0 |
| 42 |  | 65.0 | 42 |  | 65.0 |
| 45 |  | 65.0 | 45 |  | 65.0 |
| 48 |  | 65.0 | 48 |  | 65.0 |
| 51 |  | 65.0 | 51 |  | 65.0 |
| 54 |  | 65.0 | 54 |  | 64.2 |
| 57 |  | 65.0 | 57 |  | 60.8 |
| 60 |  | 65.0 | 60 |  | 57.8 |
| 63 |  | 65.0 | 63 |  | 55.0 |
| 66 |  | 65.0 | 66 |  | 52.5 |
| 69 |  | 65.0 | 69 |  | 50.2 |
| 72 |  | 65.0 | 72 |  | 48.1 |
| 30 | 78 | 65.0 | 30 | 96 | 65.0 |
| 33 |  | 65.0 | 33 |  | 65.0 |
| 36 |  | 65.0 | 36 |  | 65.0 |
| 39 |  | 65.0 | 39 |  | 65.0 |
| 42 |  | 65.0 | 42 |  | 65.0 |
| 45 |  | 65.0 | 45 |  | 65.0 |
| 48 |  | 65.0 | 48 |  | 63.5 |
| 51 |  | 65.0 | 51 |  | 59.7 |
| 54 |  | 65.0 | 54 |  | 56.4 |
| 57 |  | 65.0 | 57 |  | 53.5 |
| 60 |  | 65.0 | 60 |  | 50.8 |
| 63 |  | 65.0 | 63 |  | 48.4 |
| 66 |  | 65.0 | 66 |  | 46.2 |
| 69 |  | 65.0 | 69 |  | 44.2 |
| 72 |  | 64.1 | 72 |  | 42.3 |
| 30 | 84 | 65.0 | 30 | 102 | 65.0 |
| 33 |  | 65.0 | 33 |  | 65.0 |
| 36 |  | 65.0 | 36 |  | 65.0 |
| 39 |  | 65.0 | 39 |  | 65.0 |
| 42 |  | 65.0 | 42 |  | 64.3 |
| 45 |  | 65.0 | 45 |  | 60.0 |
| 48 |  | 65.0 | 48 |  | 56.2 |
| 51 |  | 65.0 | 51 |  | 52.9 |
| 54 |  | 65.0 | 54 |  | 50.0 |
| 57 |  | 65.0 | 57 |  | 47.3 |
| 60 |  | 65.0 | 60 |  | 45.0 |
| 63 |  | 63.2 | 63 |  | 42.8 |
| 66 |  | 60.3 | 66 |  | 40.9 |
| 69 |  | 57.7 | 69 |  | 39.1 |




## SMI MULLION LOAD TABLES

## HEAVY CONFIGURATION FOR USE IN

SMALL MISSILE IMPACT APPLICATIONS ONLY




## ANCHOR TYPE 'A \& B' TABLES

Quality
inspires"

| ANCHOR LOAD CAPACITY - PSF ExT. (+) \& INT. (-) |  |  |  |  |  | ANCHOR LOAD CAPACITY - PSF EXT. (+) \& INT. (-) |  |  |  |  |  |  | ANCHOR LOAD CAPACITY - PSF EXT. (+) \& INT. (-) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NOMINA | AL DIMs. | $\begin{aligned} & \text { ANCH } \\ & \text { TVPE } \end{aligned}$ | 'AORS | ANCH | HORS | NOMIN | IMs. |  | NCHOR |  | ANCH | Hors | NOMIN | DIMS |  | $\begin{aligned} & \text { NCHR } \\ & \text { NTPD } \end{aligned}$ |  | ${ }_{\text {ANC }}^{\text {TYP }}$ | HORS |
| $\begin{gathered} \hline \text { WIDTH } \\ \text { (w) } \end{gathered}$ | $\begin{aligned} & \text { FRAME } \\ & \text { HEIGHT } \\ & \hline \end{aligned}$ | A2 | A3 | B2 | ${ }^{83}$ | $\begin{gathered} \hline \text { WIDTH } \\ \text { (w) } \end{gathered}$ | FRAME <br> HEIGH HEIGHT | A2 | A3 | A4 | B2 | B3 | $\begin{gathered} \hline \text { WIDTH } \\ \text { (w) } \end{gathered}$ | FRAME HEIGHT | A2 | A3 | A4 | B2 | B3 |
| 30.0 | 72.0 | 90.0 | 90.0 | 90.0 | 90.0 | 30.0 | 90.0 | 90.0 | 0.0 | 90.0 | 90.0 | 0.0 | 30.0 | 108.0 | 90.0 | 90.0 | 90.0 | 90.0 | . 0 |
| 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 39.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 39.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 39.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 42.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 42.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 42.0 |  | 87.9 | 90.0 | 90.0 | 90.0 | 90.0 |
| 45.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 45.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 45.0 |  | 82.1 | 90.0 | 90.0 | 90.0 | 90.0 |
| 48.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 48.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 48.0 |  | 76.9 | 90.0 | 90.0 | 87.7 | 90.0 |
| 51.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 51.0 |  | 86.9 | 90.0 | 90.0 | 90.0 | 90.0 | 51.0 |  | 72.4 | 90.0 | 90.0 | 82.5 | 90.0 |
| 54.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 54.0 |  | 82.1 | 90.0 | 90.0 | 90.0 | 90.0 | 54.0 |  | 68.4 | 90.0 | 90.0 | 77.9 | 90.0 |
| 57.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 57.0 |  | 77.8 | 90.0 | 90.0 | 88.6 | 90.0 | 57.0 |  | 64.8 | 90.0 | 90.0 | 73.8 | 90.0 |
| 60.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 60.0 |  | 73.9 | 90.0 | 90.0 | 84.2 | 90.0 | 60.0 |  | 61.6 | 90.0 | 90.0 | 70.2 | 90.0 |
| 63.0 |  | 87.9 | 90.0 | 90.0 | 90.0 | 63.0 |  | 70.3 | 90.0 | 90.0 | 80.2 | 90.0 | 63.0 |  | 58.6 | 87.9 | 90.0 | 66.8 | 90.0 |
| 66.0 |  | 83.9 | 90.0 | 90.0 | 90.0 | 66.0 |  | 67.2 | 90.0 | 90.0 | 76.5 | 90.0 | 66.0 |  | 56.0 | 83.9 | 90.0 | 63.8 | 90.0 |
| 69.0 |  | 80.3 | 90.0 | 90.0 | 90.0 | 69.0 |  | 64.2 | 90.0 | 90.0 | 73.2 | 90.0 | 30.0 | 114.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 72.0 |  | 76.9 | 90.0 | 87.7 | 90.0 | 72.0 |  | 61.6 | 90.0 | 90.0 | 70.2 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 30.0 | 78.0 | 90.0 | 90.0 | 90.0 | 90.0 | 30.0 | 96.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 39.0 |  | 89.7 | 90.0 | 90.0 | 90.0 | 90.0 |
| 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 42.0 |  | 83.3 | 90.0 | 90.0 | 90.0 | 90.0 |
| 39.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 39.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 45.0 |  | 77.8 | 90.0 | 90.0 | 88.6 | 90.0 |
| 42.0 |  | 90.0 | . 0 | 90.0 | 90.0 | 42.0 |  | 90.0 | 0.0 | 90.0 | 90.0 | 90.0 | 48.0 |  | 72.9 | 90.0 | 90.0 | 83.1 | 90.0 |
| 45.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 45.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 51.0 |  | 68.6 | 90.0 | 90.0 | 78.2 | 90.0 |
| 48.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 48.0 |  | 86.6 | 90.0 | 90.0 | 90.0 | 90.0 | 54.0 |  | 64.8 | 90.0 | 90.0 | 73.8 | 90.0 |
| 51.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 51.0 |  | 81.5 | 90.0 | 90.0 | 90.0 | 90.0 | 57.0 |  | 61.4 | 90.0 | 90.0 | 70.0 | 90.0 |
| 54.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 54.0 |  | 76.9 | 90.0 | 90.0 | 87.7 | 90.0 | 60.0 |  | 58.3 | 87.5 | 90.0 | 66.5 | 90.0 |
| 57.0 |  | 89.7 | 90.0 | 90.0 | 90.0 | 57.0 |  | 72.9 | 90.0 | 90.0 | 83.1 | 90.0 | 63.0 |  | 55.5 | 83.3 | 90.0 | 63.3 | 90.0 |
| 60.0 |  | 85.2 | 90.0 | 90.0 | 90.0 | 60.0 |  | 69.2 | 90.0 | 90.0 | 78.9 | 90.0 | 30.0 | 120.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 63.0 |  | 81.2 | 90.0 | 90.0 | 90.0 | 63.0 |  | 66.0 | 90.0 | 90.0 | 75.2 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 66.0 |  | 77.5 | 90.0 | 88.3 | 90.0 | 66.0 |  | 63.0 | 90.0 | 90.0 | 71.7 | 90.0 | 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 69.0 |  | 74.1 | 90.0 | 84.5 | 90.0 | 69.0 |  | 60.2 | 90.0 | 90.0 | 68.6 | 90.0 | 39.0 |  | 85.2 | 90.0 | 90.0 | 90.0 | 90.0 |
| 72.0 |  | 71.0 | 90.0 | 80.9 | 90.0 | 72.0 |  | 57.7 | 86.6 | 90.0 | 65.8 | 90.0 | 42.0 |  | 79.1 | 90.0 | 90.0 | 90.0 | 90.0 |
| 30.0 | 84.0 | 90.0 | 90.0 | 90.0 | 90.0 | 30.0 | 102.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 45.0 |  | 73.9 | 90.0 | 90.0 | 84.2 | 90.0 |
| 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 48.0 |  | 69.2 | 90.0 | 90.0 | 78.9 | 90.0 |
| 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 36.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 51.0 |  | 65.2 | 90.0 | 90.0 | 74.3 | 90.0 |
| 39.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 39.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 54.0 |  | 61.6 | 90.0 | 90.0 | 70.2 | 90.0 |
| 42.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 42.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 57.0 |  | 58.3 | 87.5 | 90.0 | 66.5 | 90.0 |
| 45.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 45.0 |  | 86.9 | 90.0 | 90.0 | 90.0 | 90.0 | 60.0 |  | 55.4 | 83.1 | 90.0 | 63.1 | 90.0 |
| 48.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 48.0 |  | 81.5 | 90.0 | 90.0 | 90.0 | 90.0 | 30.0 | 126 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 51.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 51.0 |  | 76.7 | 90.0 | 90.0 | 87.4 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 54.0 |  | 87.9 | 90.0 | 90.0 | 90.0 | 54.0 |  | 72.4 | 90.0 | 90.0 | 82.5 | 90.0 | 36.0 |  | 87.9 | 90.0 | 90.0 | 90.0 | 90.0 |
| 57.0 |  | 83.3 | 90.0 | 90.0 | 90.0 | 57.0 |  | 68.6 | 90.0 | 90.0 | 78.2 | 90.0 | 39.0 |  | 81.2 | 90.0 | 90.0 | 90.0 | 90.0 |
| 60.0 |  | 79.1 | 90.0 | 90.0 | 90.0 | 60.0 |  | 65.2 | 90.0 | 90.0 | 74.3 | 90.0 | 41.0 |  | 77.2 | 90.0 | 90.0 | 88.0 | 90.0 |
| 63.0 |  | 75.4 | 90.0 | 85.9 | 90.0 | 63.0 |  | 62.1 | 90.0 | 90.0 | 70.7 | 90.0 | 30.0 | 132 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 66.0 |  | 71.9 | 90. | 82.0 | 90.0 | 66.0 |  | 59.3 | 88.9 | 90.0 | 67.5 | 90.0 | 33.0 |  | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 69.0 |  | 68.8 | 90.0 | 78.4 | 90.0 | 69.0 |  | 56.7 | 85.0 | 90.0 | 64.6 | 90.0 | 36.0 |  | 83.9 | 90.0 | 90.0 | 90.0 | 90.0 |
| 72.0 |  | 66.0 | 90.0 | 75.2 | 90.0 |  |  |  |  |  |  |  | 39.0 |  | 77.5 | 90.0 | 90.0 | 88.3 | 90.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 30.0 | 138 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 33.0 |  | 87.6 | 90.0 | 90.0 | 90.0 | 90.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 37.0 |  | 78.1 | 90.0 | 90.0 | 89.0 | 90.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 30.0 | 144 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 33.0 |  | 83.9 | 90.0 | 90.0 | 90.0 | 90.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 36.0 |  | 76.9 | 90.0 | 90.0 | 87.7 | 90.0 |

ANCHORS TYPES: SEE SHEETS 15 \& 16 FOR DESCRIPTION
A2 $=$ (2) ANCHORS TYPE 'A' AT JAMB OR EACH SIDE OF MULLION A3 $=$ (3) ANCHORS TYPE 'A' AT JAMB OR EACH SIDE OF MULLION B2 = (2) ANCOR TYE A AT JAMB OR EACH SIDE OF MULLIO B2 $=$ (2) ANCHORS TYPE 'B' AT JAMB OR EACH SIDE OF MULLION
B3 $=$ (3) ANCHORS TYPE 'B' AT JAMB OR EACH SIDE OF MULION
all other anchors to be spaced as per elevation


WIDTH $(W)=W 1(J A M B)$
WIDTH $(W)=\frac{W 2+W 3}{2}$ (MULLION)

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## ANCHOR TYPE 'C \& D' TABLES



## DOOR MULLION LOAD \& ANCHOR TABLES

| DOOR MULLION LOAD CAPACITY (PSF) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NOMINAL DIMS. |  | WITHOUT STEEL REINF. |  | With steel reinf. |  |
| WIDTH <br> (W) | fRAME HEIGHT | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) |
| 24 | 102 | 70.0 | 70.0 | 70.0 | 90.0 |
| 30 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 36 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 42 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 48 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 54 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 60 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 24 | 108 | 70.0 | 70.0 | 70.0 | 90.0 |
| 30 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 36 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 42 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 48 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 54 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 60 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 24 | 114 | 70.0 | 70.0 | 70.0 | 90.0 |
| 30 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 36 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 42 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 48 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 54 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 60 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 24 | 120 | 70.0 | 70.0 | 70.0 | 90.0 |
| 30 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 36 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 42 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 48 |  | 70.0 | 70.0 | 70.0 | 90.0 |
| 54 |  | 69.2 | 69.2 | 70.0 | 90.0 |
| 60 |  | 62.3 | 62.3 | 70.0 | 90.0 |





## DOOR MULLION LOAD \& ANCHOR TABLES

| DOOR MULLION LOAD CAPACITY (PSF) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NOMINAL DIMS. |  |  | WITHOUT STEEL REIN. |  | With steel reinf. |  |
| FRAME HEIGHT (IN.) | DOOR PANEL WIDTH-w1 (IN.) | SIDELITE WIDTH - W2 (IN.) | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) |
| 96 | 36 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
|  | 42 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
|  | 48 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
| 102 | 36 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
|  | 42 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
|  | 48 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
| 108 | 36 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
|  | 42 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 70.0 | 70.0 | 70.0 | 90.0 |
|  | 48 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 57.1 | 57.1 | 70.0 | 90.0 |
| 114 | 36 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 42 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 48 | 69.8 | 69.8 | 70.0 | 90.0 |
|  | 42 | 30 | 70.0 | 70.0 | 70.0 | 90.0 |
|  |  | 36 | 69.8 | 69.8 | 70.0 | 90.0 |
|  |  | 42 | 66.6 | 66.6 | 70.0 | 90.0 |
|  |  | 48 | 63.6 | 63.6 | 70.0 | 90.0 |
|  | 48 | 30 | 66.6 | 66.6 | 70.0 | 90.0 |
|  |  | 36 | 63.6 | 63.6 | 70.0 | 90.0 |
|  |  | 42 | 57.1 | 57.1 | 70.0 | 90.0 |
|  |  | 48 | 57.1 | 57.1 | 70.0 | 90.0 |


| DOOR MULLION LOAD CAPACITY (PSF) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NOMINAL DIMS. |  |  | without steel REINF. |  | WITH STEEL REINF. |  |
| FRAME HEIGHT (IN.) | door panel WIDTH-W1 <br> (IN.) | sidelite WIDTH - W2 (IN.) | Ext. (+) | INT. (-) | EXT. (+) | INT. (-) |
| 120 | 36 | 30 | 69.9 | 69.9 | 70.0 | 90.0 |
|  |  | 36 | 66.2 | 66.2 | 70.0 | 90.0 |
|  |  | 42 | 62.8 | 62.8 | 70.0 | 90.0 |
|  |  | 48 | 59.8 | 59.8 | 70.0 | 90.0 |
|  | 42 | 30 | 62.8 | 62.8 | 70.0 | 90.0 |
|  |  | 36 | 59.8 | 59.8 | 70.0 | 90.0 |
|  |  | 42 | 57.1 | 57.1 | 70.0 | 90.0 |
|  |  | 48 | 57.1 | 57.1 | 70.0 | 90.0 |
|  | 48 | 30 | 57.1 | 57.1 | 70.0 | 90.0 |
|  |  | 36 | 57.1 | 57.1 | 70.0 | 90.0 |
|  |  | 42 | 57.1 | 57.1 | 70.0 | 90.0 |
|  |  | 44 | 57.1 | 57.1 | 70.0 | 90.0 |








| Ітем no. | PART NUMBER | DESCRIPTION | MATERIAL |
| :---: | :---: | :---: | :---: |
| 1 | E2-0663 | LIGHT MULLION/AMB \& HEAVY JAMB | 6063-T5 |
| 2 | E9-0655 | SHALLOW POCKET FILLER | 6063-T5 |
| 3 | E9-0665 | heavy Muluon | 6063-T5 |
| 4 | E9-0656 | DEEP POCKET FILLER | 6063-T5 |
| 5 | E9-0614 | FLUSH FILIER | 6063-T5 |
| 6 | E9-0662 | LIGHT HEAD OR HEAVY JAMB | 6063-T5 |
| 7 | E1-1062 | HEAVY MULIION REINFORCEMENT | STEEL |
| 8 | E9-0651 | HEAVY HEAD / MEDIUM JAMB | 6063-T5 |
| 9 | E9-0658 | GLASS STOP | 6063-T5 |
| 10 | E9-0653 | HORIZONTAL MEMBER | 6063-T5 |
| 11 | E9-0664 | LIGHT SILL | 6063-T5 |
| 12 | E9-0625 | LIGHT SILL FLASHING | 6063-T5 |
| 13 | E9-0652 | HeAVY SILL | 6063-T5 |
| 14 | E9-0619 | HeAVY SILL FLASHING | 6063-T5 |
| 15 | E9-0657 | snap in cover | 6063-75 |
| 16 | E9-0504 | DOOR MULİIN | 6063-T5 |
| 17 | E9-0688 | FEMALE EXPANSION MULIION | 6063-T5 |
| 18 | E9-0689 | MALE EXPANSION MULIION | 6063-T5 |
| 19 | -- | EXPANSION MULLION REINFORCEMENT | Steel |
| 23 | E2-0084 | INTERIOR GLAZING SPACER | PC EPDM |
| 24 | E2-0095 | SETTING BLOCK | EPDM |
| 25 | E2-0088 | INTERIOR GLAZING GASkET | EPDM |
| 26 | E2-0083 | Exterior glazing gasket | EPDM |
| 27 | E9-0654 | MEDIUM MULIION /JAMB | 6063-T5 |


(1) LIGHT MULLION/JAMB \& HEAVY JAMB 6063-T5

(3) HEAVY MULLION

6063-T5

(4) DEEP POCKET FILLER 6063-T5

(5) FLUSH FILLER

(9) GLASS STOP

(6) HEAVY JAMB \& LIGHT HEAD

(7)

HEAVY MULLION REINFORCEMENT
STEEL
STEEL

(8) HEAVY HEAD / MEDIUM JAMB 6063-T5

(10) $\begin{aligned} & \text { HORIZONTAL MEMBER } \\ & 6063-\mathrm{T}\end{aligned}$

YKK
Quality
inspires YKK AP AMERICA



| . |  |
| :---: | :---: |
| ${ }^{\text {FL\#: }}$ FL14218 |  |
| DATE: 11.18.15 |  |
| $\begin{array}{r} \hline \text { DWG. BY: } \\ \text { SM } \end{array}$ | \| ${ }^{\text {CHK }}$ HF HF |
| SCALE: NTS |  |
| DwG.\#: YKK159 |  |
| SHEET: | 49 |


(11) LIGHT SILL

(15)

SNAP IN COVER
6063-T5

(12) LIGHT SILL FLASHING


16 DOOR MULLION 6063-T5

(13) HEAVY SILL

6063-T5


17 FEMALE EXPANSION MULLION 6063-T5
(27) MEDIUM MULLION / JAMB 6063-T5


14 HEAVY SILL FLASHING 6063-T5

(18) MALE EXPANSION MULLION 6063-T5


