# Bastrop Zoning Board of djussmentrt Agenda Bastrop city Hall City Council Chambers 131 Chestrnut Street Bastrop, TX 78002 (512) $322-8800$ 

February 20,2024
Agenda - loning Board of Adjustmentry at b:00 PM

Bastrop Zoning Board of Adjustments meetings are available to all persons regardless of disability. If you require special assistance, please contact the City Secretary at (512) 332-8800 or write 1311 Chestnut Street, 78602, or by calling through a T.D.D. (Telecommunication Device for the Deaf) to Relay Texas at 1-800-735-2989 at least 48 hours in advance of the meeting.

## 1. CALL TO ORDER

## 2. CITIZEN COMMENTS

At this time, three (3) minute comments will be taken from the audience on any topic. Anyone in attendance wishing to address the Board/Commission must complete a citizen comment form and give the completed form to the Board/Commission Secretary prior to the start of the Board/Commission meeting. In accordance with the Texas Open Meetings Act, if a citizen discusses any item not on the agenda, the Board/Commission cannot discuss issues raised or make any decision at this time. Instead, the Board/Commission is limited to making a statement of specific factual information or a recitation of existing policy in response to the inquiry. Issues may be referred to City Manager for research and possible future action.

It is not the intention of the City of Bastrop to provide a public forum for the embarrassment or demeaning of any individual or group. Neither is it the intention of the Board/Commission to allow a member of the public to slur the performance, honesty and/or integrity of the Board/Commission, as a body, or any member or members of the Board/Commission individually or collectively, or members of the City's staff. Accordingly, profane, insulting or threatening language directed toward the Board/Commission and/or any person in the Board/Commission's presence will not be tolerated.

## 3. ITEMS FOR INDIVIDUAL CONSIDERATION

3A. Consider action to nominate and point a Vice Chair.
3B. Consider action to approve meeting minutes from the October 26, 2022 Zoning Board of Adjustment Meeting.

Submitted by: Alondra Macias, Planner I

3C. Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the number of signs, sign height, base height, and internal illumination, for the Valverde subdivision, located at 242 Fm 969, within the City Limits of the City of Bastrop, Texas

Presented by: Kennedy Higgins, Senior Planner, Development Services Department
3D. Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the sign height, base height, and internal illumination, for the Bastrop Highschool, located at 1614 Chamber Street, within the City Limits of Bastrop, Texas.

Presented by: Kennedy Higgins, Senior Planner, Development Services Department
3E. Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the internal illumination, for the Mina Elementary, located at 1203 Hill St, within the City Limits of the City of Bastrop, Texas.

Presented by: Kennedy Higgins, Senior Planner, Development Services Department

## 4. UPDATES

4A. Items or topics requested by Historic Landmark Commission for future agendas.

## 5. ADJOURNMENT

I, the undersigned authority, do hereby certify that this Notice of Meeting as posted in accordance with the regulations of the Texas Open Meetings Act on the bulletin board located at the entrance to the City of Bastrop City Hall, a place of convenient and readily accessible to the general public, as well as to the City's website, www.cityofbastrop.org and said Notice was posted on the following date and time: February 15, 2024 at 5:30 p.m. and remained posted for at least two hours after said meeting was convened.
/s/ Nicole Peterson
Nicole Peterson, Development Coordinator


## STAFF REPORT

MEETING DATE: February 20, 2024
TITLE:
Consider action to approve meeting minutes from the October 26, 2022 Zoning Board of Adjustment Meeting.

STAFF REPRESENTATIVE:
Alondra Macias, Planner I

## ATTACHMENTS:

Meeting Minutes


# Zoning Board of Adjustment <br> October 26, 2022 Meeting Minutes 

The City of Bastrop Zoning Board of Adjustment met Wednesday, October 26, 2022 at 6:00 p.m. in the Council Chambers located at 1311 Chestnut Street, Bastrop, Texas 78602.

## 1. CALL TO ORDER

Scott Long called the meeting to order at 6:00 p.m.

| Scot Robichaud | Absent |
| :--- | :---: |
| Gary Moss | Present |
| Jeffery Hala-dyna | Present |
| Richard Smarzik | Present |
| Scott Long | Present |
| David Lowden | Present |

## 2. CITIZEN COMMENTS

There were no comments from citizens.

## 3. ITEMS FOR INDIVIDUAL CONSIDERATION

3A. Consider action to approve meeting minutes from the August 3, 2022 Zoning Board of Adjustment Meeting.

Richard Smarzik made a motion to approve the August 3, 2022 Zoning Board of Adjustment Meeting. Jeffery Haladyna seconded the motion and the motion carried unanimously.

3B. Public Hearing and consider action to deny variances from the Bastrop Building Block (B3) Code, Chapter 8 - Sign, Signs, Section 8.1009 (3) Large Freestanding Sign types and Article 8.3 (L) Pole Signs to allow digital price numbers on an existing sign, on Nancy Blakey Survey, Abstract 98, Acres 0.380, located at 521 W SH 71, within the City Limits of the City of Bastrop, Texas.

Jennifer Bills presented the Public Hearing and consider action to deny variances from the Bastrop Building Block (B3) Code, Chapter 8 - Sign, Signs, Section 8.1009 (3) Large Freestanding Sign types and Article 8.3 (L) Pole Signs to allow digital price numbers on an existing sign, on Nancy Blakey Survey, Abstract 98, Acres 0.380, located at 521 W SH 71, within the City Limits of the City of Bastrop, Texas to the Board Members. She stated the applicant could not be present at the previous meeting and after reviewing the application with the City Attorney there are no issues with the applicant resubmitting their application.

Jennifer Bills stated the property owner is requesting digital signage due to a tree blocking the sign, the property owner has reached out to the owner about cutting down the tree, but the owner of the tree is not willing to compromise. She mentioned the applicant stated the sales have gone down and that the Valero owner thinks the digital sign would help.

Jennifer Bills stated they do have digital signage already on the building facing the other direction and presented other properties that have their digital signage obscured by other trees. She also

# Zoning Board of Adjustment <br> October 26, 2022 Meeting Minutes 

stated when the code was being drafted digital signs were not taken into consideration because of the visibility and the city being a dark sky.

Discussion commenced between the Board Members and Staff over the following topics:

1. The sign is not illuminated externally?

- No, it is internally illuminated.

2. The street picture to the west at the Shell, the sign looks a lot closer to the Highway than the Valero sign. What is the setback?

- They are both close, but I do not have an exact answer on the set back.

3. Will the sign be refaced?

- Yes, they would take he current face out and install the digital signage.

4. Will there be any change in visibility to the sign if it becomes digital?

- No, because the tree will still block the visibility of the sign.

5. The store cannot cut or trim the tree?

- No, because it is not located on their property.

6. Is the pylon sign able as close to the road as it can be?

- Yes, it is in the southeast corner of the property.

7. Is the current sign in compliance with the current light it has now.

- When they applied for the sign, they did not say that is was going to be internally illuminated.

Lee Simmons, the applicant here on behalf of V\&S Enterprise spoke to the board members about adding digital signage and the hardships they have with competitors before the change of the sign code in 2019. He spoke about the tree blocking the sign and how he was not able to reach an agreement with the property owner regarding the tree. He thinks this is a reasonable request, since they are not changing the height or area of the sign. He mentioned the gas prices change throughout the day and they are having to go out manually to change them. He stated he understood the concern about the birds and dark sky and that they will take that into consideration.

Discussion commenced between the Board Members and the applicant over the following topics:

1. How many years has it been a Valero?

- Not many, maybe a year or longer.

2. Was it an independent business before it became Valero?

- Yes, it was an independent business.

3. Do you know how many gas stations have opened in that area since 2016?

- No, I do not have that information.

4. Is the sign a screen or LED segments?

- It will be LED segments.

Scott Long opened the Public Hearing at 6:22 p.m.
There were no comments or questions from citizens.
Scott Long closed the Public Hearing at 6:22 p.m.

# Zoning Board of Adjustment <br> October 26, 2022 Meeting Minutes 

Richard Smarzik made a motion to deny the variance from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Sign, Signs, Section 8.1009 (3) Large Freestanding Sign types and Article 8.3 (L) Pole Signs to allow digital price numbers on an existing sign, on Nancy Blakey Survey, Abstract 98, Acres 0.380, located at 521 W SH 71, within the City Limits of the City of Bastrop, Texas. Gary Moss seconded the motion and the motion carried unanimously.

## 4. ADJOURNMENT

Richard Smarzik made a motion to adjourn the meeting at 6:23 pm. Gary Moss seconded the motion and the motion carried unanimously.

## Chair

Vice-Chair

MEETING DATE: February 20, 2024

## TITLE:

Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the number of signs, sign height, base height, and internal illumination, for the Valverde subdivision, located at 242 Fm 969 , within the City Limits of the City of Bastrop, Texas

## STAFF REPRESENTATIVE:

Kennedy Higgins, Senior Planner

## ITEM DETAILS:

Site Address:
Total Acreage:
Legal Description:
Property ID:
Property Owner:
Agent Contact:
Existing Use: Vacant/Undeveloped
Existing Zoning:
Adopted Plan:
Future Land Use:

242 Fm 969 (Attachment 1)
399.878 acres

Nancy Blakey Survey, Abstract 98
8720280
Continental Homes of Texas, LP
Cynthia McCalmont - SEC Planning

P1 Nature per Development Agreement
Valverde Development Agreement, Approved July 13, 2021
Neighborhood Residential

## MEETING HISTORY:

On the January 31, 2024 meeting this item was heard but no action was taken because it was no heard by at least $75 \%$ of the membership. Only $60 \%$ of the members were present. It was postponed to the $2 / 20 / 24$ meeting.

## BACKGROUND/HISTORY:

Valverde has a development agreement with the City where they specified that monument signs are allowed in P1, which is where all of their monument signs, the two entry signs as well as the neighborhood signs are located.

The applicant is requesting a variance to allow for three things that are not permitted under the adopted Chapter 8 - Signs;

The first is in regard to the size of the entry monument sign. Per Article 8.3 (k); (b) and (ii) (2), the maximum height of a monument sign in P5 is 6 feet. The code also specifies the height of the base at 2 feet. These are the two size differences that the applicant is requesting. They are requesting two monument signs as an entry to the subdivision with a height of 25 feet 10 inches,
a width of 48 feet 11 inches and a base with the height of 6 feet. The width would be allowed if a variance was approved for the height, as a width is allowed at 2 times the height.

The second is in regard to the number of monument signs allowed per street frontage. Currently per Article $8.3(\mathrm{k})$; (a). only one monument sign is allowed per street frontage. The applicant is requesting a variance to allow for two monument signs at the entrance to the subdivision.

The third is to allow for illumination for all monument signs. Per Article $8.3(k) v$ and $v i$ - monument signs located in the sign corridors of SH 95, SH 71, and loop 150 can be internally illuminated, but a warrant can be requested for signs located outside of corridors and the applicant has included that request in the overall variances requested.

The applicant's justification for all of these requests are based on the magnitude of development along Fm 969. This road is being annexed into the City as a part of the Valverde subdivision. The applicant made the comparison of the growth on 969 making it more comparable to other major highways with similar speed limits ( 65 MPH ), comparing 969 to the City's other sign corridors like SH 95. For example, if 969 was a sign corridor, the only variance they would need would be for the quantity of entry monument signs. The size and illumination they request would be allowed in a sign corridor.

## Bastrop Building Block (B3) Code

The Bastrop Building Block ( $B^{3}$ ) Code was adopted on November 12, 2019, and include Chapter 8 Signs. The applicant is asking for a variance to following standards:

Article 8.3 K) Monument Sign

## SPECIFICATIONS

## a. Quantity: 1 max per Frontage

b. Height: $\quad 35 \mathrm{ft}$ max. in P5 on SH 71 *see v

20 ft max in P5 on SH 95 \& Loop 150

## 6 ft max in P5

c. Max Height to width ratio: 4:1

## DESCRIPTION

A Sign permanently affixed to the ground at its base or by poles that are enclosed by natural stone, stucco, brick, or wood and not mounted to a part of a Building. Pole(s) may be used to construct a Monument Sign so long as the poles are not visible below the Sign.

## SIGN DETAILS

i. A Monument Sign can be defined as a ground Sign generally having a low profile with little or no Open Space between the ground and the Sign and having a Structure constructed of masonry, wood, or materials similar in appearance.
ii. How to Measure:
(1) Maximum total Height is measured from the finished grade at the center of the Sign. If the finished grade at the center of the Sign is higher than the finished grade of the closest paved surface, then the Height shall be measured from the finished grade of the closest paved surface.
(2) The monument base shall be a maximum of 2 feet in Height and shall be included in the calculation of total Height.
(3) A Monument Sign width cannot exceed 2 times the allowable Sign Height.
iii. The max Height allowed along SH. 71 is 35 feet. Height limit is 8 feet if Band Sign Height exceeds 4 feet.
iv. The max Height allowed along Loop 150 and SH 95 is 20 feet. Height limit is 8 feet if Band Sign height exceeds 4 feet.
v. Signs along SH 71, SH 95 and Loop 150 can be internally illuminated.

## vi. A warrant for internal illumination can be requested.

vii. Cannot be located within a Sight Triangle.

## PUBLIC NOTIFICATION:

A newspaper notice was placed on January 21, 2024. Notifications were mailed to 86 adjacent property owners on January 19, 2024. At the time of this report, we have received one response with no objection.

## POLICY EXPLANATION:

Texas Local Government Code

## Sec. 211.009. AUTHORITY OF BOARD.

(a) The board of adjustment may:
(1) hear and decide an appeal that alleges error in an order, requirement, decision, or determination made by an administrative official in the enforcement of this subchapter or an ordinance adopted under this subchapter;
(2) hear and decide special exceptions to the terms of a zoning ordinance when the ordinance requires the board to do so;
(3) authorize in specific cases a variance from the terms of a zoning ordinance if the variance is not contrary to the public interest and, due to special conditions, a literal enforcement of the ordinance would result in unnecessary hardship, and so that the spirit of the ordinance is observed and substantial justice is done; and
(4) hear and decide other matters authorized by an ordinance adopted under this subchapter.
(b) In exercising its authority under Subsection (a)(1), the board may reverse or affirm, in whole or in part, or modify the administrative official's order, requirement, decision, or determination from which an appeal is taken and make the correct order, requirement, decision, or determination, and for that purpose the board has the same authority as the administrative official.
(b-1) In exercising its authority under Subsection (a)(3), the board may consider the following as grounds to determine whether compliance with the ordinance as
applied to a structure that is the subject of the appeal would result in unnecessary hardship:
(1) the financial cost of compliance is greater than 50 percent of the appraised value of the structure as shown on the most recent appraisal roll certified to the assessor for the municipality under Section 26.01, Tax Code;
(2) compliance would result in a loss to the lot on which the structure is located of at least 25 percent of the area on which development may physically occur;
(3) compliance would result in the structure not being in compliance with a requirement of a municipal ordinance, building code, or other requirement;
(4) compliance would result in the unreasonable encroachment on an adjacent property or easement; or
(5) the municipality considers the structure to be a nonconforming structure.
(c) The concurring vote of 75 percent of the members of the board is necessary to:
(1) reverse an order, requirement, decision, or determination of an administrative official;
(2) decide in favor of an applicant on a matter on which the board is required to pass under a zoning ordinance; or
(3) authorize a variation from the terms of a zoning ordinance.

## Bastrop Building Block (B3) Code

## Section 8.2.003 Variances

(d) Other requests for variances shall be forwarded to the ZBA. The ZBA may decide, subject to appropriate conditions, and only after a finding based on the evidence presented that strict compliance with the CHAPTER 8: SIGNS 179 of 249 requirements of this Code will result in substantial undue hardship, sufficient mitigation, or inequity to the applicant without sufficient corresponding benefit to the City and its citizens in accomplishing the objectives of this Chapter.
The code allows for an administrative approval for setback, effective area, size of internal components of a Sign so long as total size of Sign Face is compliant, or Height requirements, as well as to authorize one additional sign on premises more than allowed by this chapter, additionally a height increase of up to four (4) feet can be approved administratively, anything else will be the jurisdiction of the ZBA.

The Sign Administrator and ZBA shall consider:
(1) Special or unique hardship because of the size or shape of the property on which the Sign is to be located, or the visibility of the property from public roads.
(2) Hardship claim based on the exceptional topographic conditions or physical features uniquely affecting the property on which a Sign is to be located.
(3) Proposed Sign location, configuration, design, materials, and colors are harmonious.
(4) The Sign and its supporting structure is in architectural harmony with the surrounding Structures.
(5) Mitigation measures related to the Sign in question or other Signs on the same Premises.
(6) Demonstrated and documented correlation between the Variance and protecting the public health and safety.
(7) Whether the Sign could have been included in a Master Sign Plan. Master Sign plans are highly encouraged. The City will be more inclined to favorably consider a Variance request when the Variance is part of a Master Sign Plan. There will be a presumption against granting variances piecemeal, ad hoc, on a case-by-case basis when the Sign for which a Variance is sought could have been included in a Master Sign Plan and considered in the course of a comprehensive review of the entire Project's signage.
(8) The Sign Administrator may authorize the remodeling, renovation, or alteration of a Sign when some nonconforming aspect of the Sign is thereby reduced.

## RECOMMENDATION:

Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the number of signs, sign height, base height, and internal illumination, for the Valverde subdivision, located at 242 Fm 969, within the City Limits of the City of Bastrop, Texas

## ATTACHMENTS:

- Attachment 1: Location Map
- Attachment 2: Letter from Applicant
- Attachment 3: Master Sign Plan
- Attachment 4: Code referencing Variance requests
- Attachment 5: Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code Monument Sign Requirement
- Attachment 6: Blank Findings for Sec 8.2.003 Variances


January 09, 2023

## Re: Valverde - Sign Variance Project Description Letter

To: City of Bastrop, c/o Kennedy Higgins, James Cowey

Kennedy/James,

Per our correspondence over the past several months, please find attached a sign variance application for the Valverde subdivision primary entry monument signs. The application includes two entry monuments, one on each side of the collector road (street A) at the intersection of FM 969 (see the attached master sign plan exhibits). The developer is requesting variances from the City of Bastrop B3 sign code. The first variance is increasing the maximum monument sign dimensions of 6 feet in height and 12 feet in width with a base height of 2 feet to a monument sign size of 25 feet 10 inches in height and 48 feet 11 inches in width with a base height of 6 feet. The Second variance from the B3 sign code is to increase the allowed amount of signage along street frontage from 1 sign to 2 signs along Fm 969. The proposed signage will be internally illuminated using back lighting to create halo effect per the sign details provided within the master sign plan. The back lighting will fall in accordance with SEC. 6.6.010 (b) and not exceed the maximum temperature (3000 Kelvin).

Justifications for these variance requests are based around the overall magnitude of the development as a master planned community and the location along a major arterial roadway, FM 969. The farm to market roadway is being annexed into the city limits as part of the Valverde project. Speed limits along FM 969 reach 65 MPH , making it a roadway classification that is more compatible with large scale roads within Bastrop. The target market will be travelling Northbound and Southbound on roadway. Allowing 2 entry features along FM 969 will help identify the project going in both directions. As a comparison, the City of Bastrop B3 Code allows for larger scale signs along major roadways with similar speed limits. For example, properties along SH-71 are allowed an entry monument with a max height of 35 feet. With FM 969 being annexed into the City, the applicant believes that it would be reasonable for the larger sign provisions to apply along this major roadway.

Allowing these variance requests will create the opportunity for the large-scale Valverde master planned community to construct signage that is in proportion to the magnitude of the development and the adjacent roadway. Higher traffic speeds, larger right of ways and further setbacks from the pavement are results that come from adjacency to larger arterial roadways. These elements impact the legibility of signage and add to the justification for signage that exceeds the city minimums for monument signs.

The attached application packet includes exhibits for the entry monuments from the Valverde master sign plan. The exhibits illustrate the monument location, design form, materials, and colors. Thank you for your time and consideration of this variance request. If you have any questions, concerns or if I can provide any additional information, please do not hesitate to contact me.

Sincerely,
Cynthia McCalmont PLA, ASLA
Landscape Architect
cynthiam@secplanning.com
SEC Planning, LLC
o. 512.246.7003
c. 512.294.1490


## SIGN LEGEND

Entry Monument Sign (2)B Neighborhood Monument Sign (15)
C Model Home Sidewalk Sign (7)
(D) New Home Direction Sign (12)

E Sold / Available Sign (One per Lot Allowed)
(F) Model Home Information Sign (2)
(G) Temporary Community Entry Sign (1)
(H) Temporary New Home Sign (5)

Zone P-1


SEC Planning, LLC
MASTER SIGN PLAN


HALO LIT LETTING


## ENTRY MONUMENT - MONUMENT SIGN

Scale: $3 / 32^{\prime \prime}=1^{\prime}-0^{\prime \prime}$
TEMP. COMMUNITY ENTRY SIGN $\stackrel{+}{+}$
SEE SHEET D-4P (G) $\qquad$
(A-1 $\frac{\text { ENTRY MONUMENT DETAIL PLAN }}{\text { Scale: }} 1{ }^{1 "}=100^{\circ}$


B SEIGHBORHOOD MONUMENT SIGN - MONUMENT SIGN


## B-1 SEIGHBORHOOD MONUMENT SIGN - ILLUSTRATION <br> Scale: NTS






## B-9

NEIGHBORHOOD MONUMENT SIGN DETAIL PLAN Scale: $1^{\prime \prime}=30^{\circ}$





B-12 $\frac{\text { NEIGHBORHO }}{\text { scale: } 11=30^{\prime}} \frac{1}{}$


B-13 NEIGHBORHOOD MONUMENT SIGN DETAIL PLAN



(F MODEL HOME INFORMATION SIGN Scale: $3 / 16^{\prime \prime}=1^{\prime}-0^{\prime \prime}$


(G) $\frac{\text { TEMPORARY COMMUNITY ENTRY SIGN - }}{\text { CONSTRUCTION SITE SIGN Scale: } 1 / 4^{\prime \prime}=1^{1}-0^{\prime \prime}}$

(H) TEMPORARY NEW HOMES SIGN-


## IIII: STREET A

LIST OF VARIANCES \& ALTERNATIVE STANDARDS

| \# | Ordinance | Description | Requirement | Requested Variance or Alternative | Justification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | SEC. 8.1.009 (b)(4) B. | Large Freestanding Sign Number | One Sign per street frontage of a lot. | Two (2) Freestanding Signs per street frontage at main entry into Subdivision. | To have the ability to identify the project to both directions of travel along FM 969. Target market shall be travelling Northbound and Southbound on roadway. |
|  | ARTICLE. 8.3. <br> (k)(b) | Monument Sign (Height) | Height: $6 \mathrm{ft} \mathrm{max} \mathrm{in} \mathrm{P5}$ | Height: 25'-10" | The magnitude of the deveopment and the loaction off a high speed road (FM 969) |
| 2 | ARTICLE. 8.3. <br> (k)(ii)(2) | Monument Sign (Base Height) | maximum height of base: 2 ft | Height of base: 6'-1" |  |
| 3 | SEC. 8.3. <br> (k)(vi) | Monument Sign (Warrant of illumination) | Large Freestanding Signs may only be externally illuminated unless approved by Warrant or located within the SH 71/SH 95/Loop 150 Corridors. | Large Entry Monument and Smaller Neighborhood <br> Monument Signs may be illuminated with "halo lit", aka "backlit" lettering. All installed lighting must comply with the SEC. 6.6.006 Shielding \& total outdoor light output standards from the B3 Code. | Provides shielded and indirect illumination behind each letter and creates a silhouetted letter without glare for the enhanced signage visibility to drivers. |


| K) |  |
| :--- | :--- | :--- | :--- |
| MONUMENT | SPECIFICATIONS $V$ |

## Section 8.2.003 Variances

(d) The ZBA may decide, subject to appropriate conditions, and only after a finding based on the evidence presented that strict compliance with the requirements of this Code will result in substantial undue hardship, sufficient mitigation, or inequity to the applicant without sufficient corresponding benefit to the City and its citizens in accomplishing the objectives of this Chapter.

The Sign Administrator and ZBA shall consider:
(1) Special or unique hardship because of the size or shape of the property on which the Sign is to be located, or the visibility of the property from public roads.
(2) Hardship claim based on the exceptional topographic conditions or physical features uniquely affecting the property on which a Sign is to be located.
(3) Proposed Sign location, configuration, design, materials and colors are harmonious.
(4) The Sign and its supporting structure is in architectural harmony with the surrounding Structures.
(5) Mitigation measures related to the Sign in question or other Signs on the same Premises.
(6) Demonstrated and documented correlation between the Variance and protecting the public health and safety.
(7) Whether the Sign could have been included in a Master Sign Plan. Master Sign plans are highly encouraged. The City will be more inclined to favorably consider a Variance request when the Variance is part of a Master Sign Plan. There will be a presumption against granting variances piecemeal, ad hoc, on a case-by-case basis when the Sign for which a Variance is sought could have
been included in a Master Sign Plan and considered in the course of a comprehensive review of the entire Project's signage.
(8) The Sign Administrator may authorize the remodeling, renovation, or alteration of a Sign when some nonconforming aspect of the Sign is thereby reduced.

MEETING DATE: February 20, 2024

## TITLE:

Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the sign height, base height, and internal illumination, for the Bastrop Highschool, located at 1614 Chamber street, within the City Limits of the City of Bastrop, Texas.

## STAFF REPRESENTATIVE:

Kennedy Higgins, Senior Planner

## ITEM DETAILS:

| Site Address: | 1614 Chamber Street (Attachment 1) |
| :--- | :--- |
| Total Acreage: | 24 acres |
| Legal Description: | Farm Lot 33 \& 34 East of Main street |
| Property ID: | 32189 |
| Property Owner: | BISD |
| Agent Contact: | Lee Raspberry |
| Existing Use: | School |
| Existing Zoning: | P-CS - Civic Space |
| Future Land Use: | Public and Institutional |

## BACKGROUND/HISTORY:

The applicant is requesting a variance to allow for three things that are not permitted under the adopted Chapter 8 - Signs;

The first two are in regard to the size of the monument sign. Per Article 8.3 (k); (b) and (ii) (2), the maximum height of a monument sign in P5 is 6 feet. The code also specifies the height of the base at 2 feet. The applicant is requesting a sign 7 feet in height. The base is allowed to be a maximum of 2 feet in height, and their base is proposed at 2 feet 6 inches.

The third is to allow for illumination for all monument signs. Per Article 8.3 ( $k$ ) vand vi - monument signs located in the sign corridors of SH 95, SH 71, and loop 150 can be internally illuminated, but a warrant can be requested for signs located outside of corridors and the applicant has included that request in the overall variances requested.

## Bastrop Building Block (B3) Code

The Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code was adopted on November 12, 2019, and include Chapter 8 Signs. The applicant is asking for a variance to following standards:

Article 8.3 K) Monument Sign

## SPECIFICATIONS

a. Quantity: 1 max per Frontage
b. Height: $\quad 35 \mathrm{ft}$ max. in P5 on SH 71 *see v

20 ft max in P5 on SH 95 \& Loop 150
6 ft max in P5
c. Max Height to width ratio: $4: 1$

DESCRIPTION
A Sign permanently affixed to the ground at its base or by poles that are enclosed by natural stone, stucco, brick, or wood and not mounted to a part of a Building. Pole(s) may be used to construct a Monument Sign so long as the poles are not visible below the Sign.
SIGN DETAILS
i. A Monument Sign can be defined as a ground Sign generally having a low profile with little or no Open Space between the ground and the Sign and having a Structure constructed of masonry, wood, or materials similar in appearance.
ii. How to Measure:
(1) Maximum total Height is measured from the finished grade at the center of the Sign. If the finished grade at the center of the Sign is higher than the finished grade of the closest paved surface, then the Height shall be measured from the finished grade of the closest paved surface.
(2) The monument base shall be a maximum of 2 feet in Height and shall be included in the calculation of total Height.
(3) A Monument Sign width cannot exceed 2 times the allowable Sign Height.
iii. The max Height allowed along SH. 71 is 35 feet. Height limit is 8 feet if Band Sign Height exceeds 4 feet.
iv. The max Height allowed along Loop 150 and SH 95 is 20 feet. Height limit is 8 feet if Band Sign height exceeds 4 feet.
v. Signs along SH 71, SH 95 and Loop 150 can be internally illuminated.

## vi. A warrant for internal illumination can be requested.

vii. Cannot be located within a Sight Triangle.

## PUBLIC NOTIFICATION:

A newspaper notice was placed on February 7, 2024. Notifications were mailed to 27 adjacent property owners on February 6, 2024. At the time of this report, we have received one response that is in favor.

## POLICY EXPLANATION:

## Texas Local Government Code

Sec. 211.009. AUTHORITY OF BOARD.
(a) The board of adjustment may:
(1) hear and decide an appeal that alleges error in an order, requirement, decision, or determination made by an administrative official in the enforcement of this subchapter or an ordinance adopted under this subchapter;
(2) hear and decide special exceptions to the terms of a zoning ordinance when the ordinance requires the board to do so;
(3) authorize in specific cases a variance from the terms of a zoning ordinance if the variance is not contrary to the public interest and, due to special conditions, a literal enforcement of the ordinance would result in unnecessary hardship, and so that the spirit of the ordinance is observed and substantial justice is done; and
(4) hear and decide other matters authorized by an ordinance adopted under this subchapter.
(b) In exercising its authority under Subsection (a)(1), the board may reverse or affirm, in whole or in part, or modify the administrative official's order, requirement, decision, or determination from which an appeal is taken and make the correct order, requirement, decision, or determination, and for that purpose the board has the same authority as the administrative official.
(b-1) In exercising its authority under Subsection (a)(3), the board may consider the following as grounds to determine whether compliance with the ordinance as applied to a structure that is the subject of the appeal would result in unnecessary hardship:
(1) the financial cost of compliance is greater than 50 percent of the appraised value of the structure as shown on the most recent appraisal roll certified to the assessor for the municipality under Section 26.01, Tax Code;
(2) compliance would result in a loss to the lot on which the structure is located of at least 25 percent of the area on which development may physically occur;
(3) compliance would result in the structure not being in compliance with a requirement of a municipal ordinance, building code, or other requirement;
(4) compliance would result in the unreasonable encroachment on an adjacent property or easement; or
(5) the municipality considers the structure to be a nonconforming structure.
(c) The concurring vote of 75 percent of the members of the board is necessary to:
(1) reverse an order, requirement, decision, or determination of an administrative official;
(2) decide in favor of an applicant on a matter on which the board is required to pass under a zoning ordinance; or
(3) authorize a variation from the terms of a zoning ordinance.

## Bastrop Building Block (B3) Code

## Section 8.2.003 Variances

(d) Other requests for variances shall be forwarded to the ZBA. The ZBA may decide, subject to appropriate conditions, and only after a finding based on the evidence presented that strict compliance with the CHAPTER 8: SIGNS 179 of 249 requirements
of this Code will result in substantial undue hardship, sufficient mitigation, or inequity to the applicant without sufficient corresponding benefit to the City and its citizens in accomplishing the objectives of this Chapter.
The code allows for an administrative approval for setback, effective area, size of internal components of a Sign so long as total size of Sign Face is compliant, or Height requirements, as well as to authorize one additional sign on premises more than allowed by this chapter, additionally a height increase of up to four (4) feet can be approved administratively, anything else will be the jurisdiction of the ZBA.

The Sign Administrator and ZBA shall consider:
(1) Special or unique hardship because of the size or shape of the property on which the Sign is to be located, or the visibility of the property from public roads.
(2) Hardship claim based on the exceptional topographic conditions or physical features uniquely affecting the property on which a Sign is to be located.
(3) Proposed Sign location, configuration, design, materials, and colors are harmonious.
(4) The Sign and its supporting structure is in architectural harmony with the surrounding Structures.
(5) Mitigation measures related to the Sign in question or other Signs on the same Premises.
(6) Demonstrated and documented correlation between the Variance and protecting the public health and safety.
(7) Whether the Sign could have been included in a Master Sign Plan. Master Sign plans are highly encouraged. The City will be more inclined to favorably consider a Variance request when the Variance is part of a Master Sign Plan. There will be a presumption against granting variances piecemeal, ad hoc, on a case-by-case basis when the Sign for which a Variance is sought could have been included in a Master Sign Plan and considered in the course of a comprehensive review of the entire Project's signage.
(8) The Sign Administrator may authorize the remodeling, renovation, or alteration of a Sign when some nonconforming aspect of the Sign is thereby reduced.

## RECOMMENDATION:

Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the sign height, base height, and internal illumination, for the Bastrop Highschool, located at 1614 Chamber street, within the City Limits of the City of Bastrop, Texas.

## ATTACHMENTS:

- Attachment 1: Location Map
- Attachment 2: Application
- Attachment 3: Sign Study
- Attachment 4: Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code Monument Requirement
- Attachment 5: Blank Findings for Sec 8.2.003 Variances




## 1614 Chamber Street BHS Sign Variance Location Map

Date: 1/30/2024 The accuracy and precision of this cartographic data is limited and should be used for information /planning purposes only. This data does not land surveyors nor does it constitute an "official" verification of zoning, land use classification, or other classification set forth in local, state, or federal regulatory processes. The City of Bastrop, nor any of its employees, do not make any warranty of merchantability and fitmess for particular purpose, or assumes any legal liabity or responsibii
accuracy, completeness or usefulliness of accuracy, completeness or usefullness of
information, nor does it represent that its information, nor does it represent that its
not infringe upon privately owned righ

## Attention: City of Bastrop

City of Bastrop, TX
Bastrop City Hall
1311 Chestnut Street
Bastrop, Texas 78602
Reference: Bastrop High School - Sign Variance
1614 Chambers Street, Bastrop, Texas 78602

Please accept this letter and accompanying exhibits as our application for a Sign Variance for Bastrop High School.

The proposed monument sign for this project has an overall dimension of $7^{\prime}-0^{\prime \prime} \mathrm{H}, 11-9^{\prime \prime \prime} \mathrm{W}$. It includes the following parts:

- Base: 2' H, 10' W brick base, the brick to match the new addition.
- Information Board (LED): 5'-0" H, 10'W LED screen at ratio of 9:16 per School Signs LED Matrix system, B.O.D.

The checklist and all required exhibits for the Sign Variance can be found in the attachments of this submittal. Copy of current tax certificates is pending to be submitted. Should you have any questions or concerns please do not hesitate to contact our office.

Respectfully,
STANTEC ARCHITECTURE INC.


Amber O'Donnell
Principal
Phone: 512.867.6012
aodonnell@stantec.com









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Bastrop

\(\underset{\substack{Cientifioed<br>BATIROP IS.D.}}{ }\)

BASTROP HIGH SCHOOL ADDITIONS AND

| RENOVATIONS |
| :--- |
| 1614, Chanbeas St |


COMPOSITE PLANS

ject Nor


The Galaxy ${ }^{\circledR}$ GT6x offers high-value Galaxy features combined with high-resolution 8 mm surface mount LED technology to provide highquality images.

## 8 MM TECHNICAL SPECIFICATIONS <br> Character Height:

2" (7 pixel font)
Line Spacing:
$8.13 \mathrm{~mm}\left(0.3^{\prime \prime}\right)$
Pixel Configuration:
3-in-1 SMD
Maximum Brightness:
8,000 nits
Full Color Capability:
281 trillion colors
Viewing Angle:
160 degrees horizontal $\times 70$ degrees vertical Min Viewing Distance:

## PRODUCT FEATURES

- All sealed components
- Quick connects
- Mounting clips
- High-contrast louvers
- Redundant module signal
- Large sections for fast installation
- Front ventilation on displays less than eight feet tall
- No spreader beam required for displays greater than eight feet tall
- Single-step module removal
- Shallow cabinet depth
- Narrow cabinet borders



## GT6x SERIES SPECIFICATIONS

## Estimated LED Lifetime:

100,000+ hours

## Contrast Enhancement:

Non-reflective black louvers and module
face grooves disperse light

## Message Capability:

Text, graphics, logos, basic animation, video clips, multiple font styles, and sizes

## Control Software:

Venus ${ }^{\circledR}$ Control Suite

## Power:

120, 120/240 VAC Single Phase

## Display Dimming:

64 levels (Automatic, scheduled or manual control)

## Communication Options:

Ethernet Fiber Optic, Ethernet Bridge Radio,
Remote Cellular, Ethernet CAT5
Operating Temperature:
$-40^{\circ} \mathrm{F}$ to $120^{\circ} \mathrm{F}$ with $99 \% \mathrm{RH}$ non-condensing
Compliance Information:
UL Listed, FCC compliance

## MODEL NUMBER GUIDE



DISPLAY CONFIGURATIONS


Single-face (SF)
Available in all sizes


Two-view (2V)
Available in all sizes

| Lines x Columns | Sections/ Ventilated | Cabinet Dimensions Feet-Inches HxWxD | Cabinet Dimensions Meters HxWxD | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $45 \times 180$ | Sing/Ft | $1^{\prime \prime} 9^{\prime \prime} \times 5^{\prime \prime} 1$ " $\times 7$ ' | $0.53 \times 1.54 \times 0.18$ | 8.6 (0.8) | 5.8 (0.6) | 65 (30) | 5/36 | 2" - 14" | 495 |
| $45 \times 225$ | Sing/Ft | $11^{\prime \prime} \times 6{ }^{\prime \prime} 3^{\prime \prime} \times 7$ ' | $0.53 \times 1.91 \times 0.18$ | 10.7 (1.0) | 7.2 (0.8) | 80 (37) | 5/45 | 2" - 14" | 610 |
| $45 \times 270$ | Sing/Ft | 1'9' $\times 7$ 7'6'x $\times$ ' | $0.53 \times 2.28 \times 0.18$ | 12.7 (1.2) | 8.7 (0.9) | 95 (44) | 5/54 | 2' $-14^{\prime \prime}$ | 720 |
| $45 \times 315$ | Sing/Ft | $19^{\prime \prime} \times 8^{\prime \prime} 8^{\prime \prime} \times 7$ ' | $0.53 \times 2.64 \times 0.18$ | 14.8 (1.4) | 10.1 (1.0) | 110 (50) | 5/63 | 2' $-14^{\prime \prime}$ | 835 |
| $45 \times 360$ | Sing/Ft | $11^{\prime \prime} \times 9^{\prime \prime} 11$ x $\times$ " | $0.53 \times 3.01 \times 0.18$ | 16.8 (1.6) | 11.6 (1.2) | 125 (57) | 5/72 | 2" - 14" | 945 |
| $45 \times 405$ | Sing/Ft | $19^{\prime \prime} \times 11^{\prime \prime} 1{ }^{\prime \prime} \times 7$ ( | $0.53 \times 3.37 \times 0.18$ | 18.8 (1.8) | 13.0 (1.3) | 140 (64) | 5/81 | 2' $-14^{\prime \prime}$ | 1060 |
| $45 \times 450$ | Sing/Ft | $11^{\prime \prime} \times 12^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 3.74 \times 0.18$ | 20.9 (1.9) | 14.4 (1.5) | 155 (71) | 5/90 | 2" - 14" | 1170 |
| $45 \times 495$ | Sing/Ft | $11^{\prime \prime} \times 13^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 4.1 \times 0.18$ | 22.9 (2.1) | 15.9 (1.6) | 170 (78) | 5/99 | $2^{\prime \prime}$ - 14' | 1285 |
| $45 \times 540$ | Sing/Ft | $11^{\prime \prime} \times 14^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 4.47 \times 0.18$ | 25.0 (2.3) | 17.3 (1.8) | 185 (84) | 5/108 | 2' $-14^{\prime \prime}$ | 1395 |
| $45 \times 585$ | Sing/Ft | $11^{\prime \prime} \times 15^{\prime \prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 4.84 \times 0.18$ | 27.0 (2.5) | 18.8 (1.9) | 200 (91) | 5/117 | $2^{\prime \prime}$ - 14" | 1510 |
| $45 \times 630$ | Sing/Ft | $11^{\prime \prime} \times 17^{\prime \prime} 1{ }^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 5.2 \times 0.18$ | 29.0 (2.7) | 20.2 (2.1) | 215 (98) | 5/126 | 2' $-14^{\prime \prime}$ | 1620 |
| $45 \times 675$ | Sing/Ft | $11^{\prime \prime} \times 18^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 5.57 \times 0.18$ | 31.1 (2.9) | 21.6 (2.2) | 230 (105) | 5/135 | 2" - 14" | 1735 |
| $45 \times 720$ | Sing/Ft | 1'9' $\times 19^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 5.93 \times 0.18$ | 33.1 (3.1) | 23.1 (2.4) | 245 (112) | 5/144 | 2' $-14^{\prime \prime}$ | 1850 |
| $45 \times 765$ | Sing/Ft | $11^{\prime \prime} \times 20^{\prime \prime} 8^{\prime \prime} \times 7$ ' | $0.53 \times 6.3 \times 0.18$ | 35.2 (3.3) | 24.5 (2.5) | 260 (118) | 5/153 | 2' $-14^{\prime \prime}$ | 1960 |
| $45 \times 810$ | Sing/Ft | $11^{\prime \prime} \times 21^{\prime \prime 111} \times 7$ ' | $0.53 \times 6.66 \times 0.18$ | 37.2 (3.5) | 26.0 (2.6) | 275 (125) | 5/162 | 2' $-14^{\prime \prime}$ | 2075 |
| $45 \times 855$ | Sing/Ft | $11^{\prime \prime} \times 23^{\prime \prime} 1{ }^{\prime \prime} \times 7$ ' | $0.53 \times 7.03 \times 0.18$ | 39.2 (3.7) | 27.4 (2.8) | 290 (132) | 5/171 | 2' $-14^{\prime \prime}$ | 2185 |
| $45 \times 900$ | Sing/Ft | $1^{\prime \prime} 9^{\prime \prime} \times 24^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $0.53 \times 7.4 \times 0.18$ | 41.3 (3.8) | 28.8 (3.0) | 305 (139) | 5/180 | $2^{\prime \prime}$ - 14" | 2300 |
| $90 \times 135$ | Sing/Ft | $2^{\prime \prime} 11^{\prime \prime} \times 3^{\prime \prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 1.18 \times 0.18$ | 11.2 (1.1) | 8.7 (0.9) | 90 (41) | 11/27 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 630 |
| $90 \times 180$ | Sing/Ft | $2^{\prime} 11^{\prime \prime} \times 5^{\prime \prime} 1^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 1.54 \times 0.18$ | 14.6 (1.4) | 11.6 (1.2) | 125 (57) | 11/36 | $2^{\prime \prime}-28^{\prime \prime}$ | 825 |
| $90 \times 225$ | Sing/Ft | $2^{\prime} 11{ }^{\prime \prime} \times 6{ }^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 1.91 \times 0.18$ | 18.1 (1.7) | 14.4 (1.5) | 155 (71) | 11/45 | $2^{\prime \prime}-28^{\prime \prime}$ | 1020 |
| $90 \times 270$ | Sing/Ft | $2^{\prime} 11{ }^{\prime \prime} \times 7^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 2.28 \times 0.18$ | 21.6 (2.0) | 17.3 (1.8) | 185 (84) | 11/54 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 1215 |
| $90 \times 315$ | Sing/Ft | $2^{\prime} 11{ }^{\prime \prime} \times 8^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 2.64 \times 0.18$ | 25.1 (2.3) | 20.2 (2.1) | 215 (98) | 11/63 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 1410 |
| $90 \times 360$ | Sing/Ft | $2^{\prime} 111^{\prime \prime} \times 9^{\prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 3.01 \times 0.18$ | 28.6 (2.7) | 23.1 (2.4) | 245 (112) | 11/72 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 1610 |
| $90 \times 405$ | Sing/Ft | $2^{\prime} 11^{\prime \prime} \times 11^{\prime \prime} 1 \times{ }^{\prime \prime}$ | $0.89 \times 3.37 \times 0.18$ | 32.0 (3.0) | 26.0 (2.6) | 275 (125) | 11/81 | 2" - 28" | 1805 |
| $90 \times 450$ | Sing/Ft | $2^{\prime} 11^{\prime \prime} \times 12^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 3.74 \times 0.18$ | 35.5 (3.3) | 28.8 (3.0) | 305 (139) | 11/90 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 2000 |
| $90 \times 495$ | Sing/Ft | $2^{\prime} 11^{\prime \prime} \times 13^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 4.1 \times 0.18$ | 39.0 (3.6) | 31.7 (3.3) | 335 (152) | 11/99 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 2195 |
| $90 \times 540$ | Sing/Ft | $2^{\prime} 11^{\prime \prime} \times 14^{\prime \prime} 8^{\prime \prime} \times 7$ ' | $0.89 \times 4.47 \times 0.18$ | 42.5 (4.0) | 34.6 (3.5) | 365 (166) | 11/108 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 2390 |
| $90 \times 585$ | Sing/Ft | $2^{\prime} 11{ }^{\prime \prime} \times 15^{\prime \prime 111} \times 7^{\prime \prime}$ | $0.89 \times 4.84 \times 0.18$ | 46.0 (4.3) | 37.5 (3.8) | 395 (180) | 11/117 | $2^{\prime \prime}-28^{\prime \prime}$ | 2585 |
| $90 \times 630$ | Sing/Ft | $2^{\prime} 11^{\prime \prime} \times 17^{\prime \prime} 1$ x $\times$ " | $0.89 \times 5.2 \times 0.18$ | 49.4 (4.6) | 40.4 (4.2) | 425 (193) | 11/126 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 2780 |
| $90 \times 675$ | Sing/Ft | $2^{\prime \prime 111 " \times 18 ' 3 ' 1 ~} \times 7^{\prime \prime}$ | $0.89 \times 5.57 \times 0.18$ | 52.9 (5.0) | 43.2 (4.4) | 455 (207) | 11/135 | $2^{\prime \prime}-28^{\prime \prime}$ | 2975 |
| $90 \times 720$ | Sing/Ft | $2^{\prime} 111^{\prime \prime} \times 19^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 5.93 \times 0.18$ | 56.4 (5.3) | 46.1 (4.7) | 485 (220) | 11/144 | $2^{\prime \prime}-28^{\prime \prime}$ | 3170 |
| $90 \times 765$ | Sing/Ft | $2^{\prime} 111^{\prime \prime} \times 20^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 6.3 \times 0.18$ | 59.9 (5.6) | 49.0 (5.0) | 515 (234) | 11/153 | $2^{\prime \prime}-28^{\prime \prime}$ | 3365 |
| $90 \times 810$ | Sing/Ft | $2^{\prime} 11{ }^{\prime \prime} \times 21^{\prime \prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 6.66 \times 0.18$ | 63.4 (5.9) | 51.9 (5.3) | 545 (248) | 11/162 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 3560 |
| $90 \times 855$ | Sing/Ft | $2^{\prime} 11^{\prime \prime} \times 23^{\prime \prime} 1{ }^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 7.03 \times 0.18$ | 66.8 (6.3) | 54.8 (5.6) | 575 (261) | 11/171 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 3755 |
| $90 \times 900$ | Sing/Ft | $2^{\prime} 111^{\prime \prime} \times 24^{\prime \prime} \times 7^{\prime \prime}$ | $0.89 \times 7.4 \times 0.18$ | 70.3 (6.6) | 57.6 (5.9) | 605 (275) | 11/180 | $2^{\prime \prime}$ - $28^{\prime \prime}$ | 3950 |
| $135 \times 90$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 2^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 0.81 \times 0.18$ | 10.9 (1.0) | 8.7 (0.9) | 95 (44) | 16/18 | $2^{\prime \prime}-43^{\prime \prime}$ | 630 |
| $135 \times 135$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 3^{\prime} 111^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 1.18 \times 0.18$ | 15.8 (1.5) | 13.0 (1.2) | 140 (64) | 16/27 | $2^{\prime \prime}-43^{\prime \prime}$ | 970 |
| $135 \times 180$ | Sing/Ft | $4^{\prime \prime} 2^{\prime \prime} \times 5^{\prime} 1{ }^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 1.54 \times 0.18$ | 20.7 (1.9) | 17.3 (1.7) | 185 (84) | 16/36 | $2^{\prime \prime}$ - $43^{\prime \prime}$ | 1275 |
| $135 \times 225$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 6^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 1.91 \times 0.18$ | 25.6 (2.4) | 21.6 (2.1) | 230 (105) | 16/45 | $2^{\prime \prime}-43^{\prime \prime}$ | 1585 |
| $135 \times 270$ | Sing/Ft | $4^{\prime \prime} 2^{\prime \prime} \times 7^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 2.28 \times 0.18$ | 30.5 (2.9) | 26.0 (2.4) | 275 (125) | 16/54 | $2^{\prime \prime}-43^{\prime \prime}$ | 1895 |
| $135 \times 315$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 8^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 2.64 \times 0.18$ | 35.5 (3.3) | 30.3 (2.9) | 320 (146) | 16/63 | $2^{\prime \prime}-43^{\prime \prime}$ | 2200 |
| $135 \times 360$ | Sing/Ft | $4^{\prime \prime} 2^{\prime \prime} \times 9^{\prime \prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 3.01 \times 0.18$ | 40.4 (3.8) | 34.6 (3.3) | 365 (166) | 16/72 | $2^{\prime \prime}$ - $43^{\prime \prime}$ | 2510 |
| $135 \times 405$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 11^{\prime \prime} 1 \times 7^{\prime \prime}$ | $1.25 \times 3.37 \times 0.18$ | 45.3 (4.2) | 38.9 (3.6) | 410 (186) | 16/81 | $2^{\prime \prime}-43^{\prime \prime}$ | 2815 |
| $135 \times 450$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 12^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 3.74 \times 0.18$ | 50.2 (4.7) | 43.2 (4.1) | 455 (207) | 16/90 | $2^{\prime \prime}$ - $43^{\prime \prime}$ | 3125 |
| $135 \times 495$ | Sing/Ft | $4^{\prime \prime} 2^{\prime \prime} \times 13^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 4.1 \times 0.18$ | 55.1 (5.1) | 47.6 (4.5) | 500 (227) | 16/99 | $2^{\prime \prime}-43^{\prime \prime}$ | 3430 |
| $135 \times 540$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 14^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 4.47 \times 0.18$ | 60.1 (5.6) | 51.9 (4.8) | 545 (248) | 16/108 | $2^{\prime \prime}-43^{\prime \prime}$ | 3740 |
| $135 \times 585$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 15^{\prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 4.84 \times 0.18$ | 65.0 (6.1) | 56.2 (5.3) | 590 (268) | 16/117 | $2^{\prime \prime}-43^{\prime \prime}$ | 4050 |
| $135 \times 630$ | Sing/Ft | $4^{\prime \prime} 2^{\prime \prime} \times 17^{\prime \prime} 1{ }^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 5.2 \times 0.18$ | 69.9 (6.5) | 60.5 (5.7) | 635 (289) | 16/126 | $2^{\prime \prime}-43^{\prime \prime}$ | 4355 |
| $135 \times 675$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 18^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 5.57 \times 0.18$ | 74.8 (7.0) | 64.8 (6.1) | 680 (309) | 16/135 | $2^{\prime \prime}-43^{\prime \prime}$ | 4665 |
| $135 \times 720$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 19^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 5.93 \times 0.18$ | 79.7 (7.4) | 69.2 (6.5) | 725 (329) | 16/144 | $2^{\prime \prime}-43^{\prime \prime}$ | 4970 |
| $135 \times 765$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 20^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 6.3 \times 0.18$ | 84.7 (7.9) | 73.5 (6.9) | 770 (350) | 16/153 | $2^{\prime \prime}-43^{\prime \prime}$ | 5280 |
| $135 \times 810$ | Sing/Ft | $4^{\prime \prime} 2^{\prime \prime} \times 21^{\prime \prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 6.66 \times 0.18$ | 89.6 (8.3) | 77.8 (7.3) | 815 (370) | 16/162 | $2^{\prime \prime}-43^{\prime \prime}$ | 5585 |
| $135 \times 855$ | Sing/Ft | $4^{\prime \prime} 2^{\prime \prime} \times 23^{\prime \prime} 1{ }^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 7.03 \times 0.18$ | 94.5 (8.8) | 82.1 (7.7) | 860 (391) | 16/171 | $2^{\prime \prime}-43^{\prime \prime}$ | 5895 |
| $135 \times 900$ | Sing/Ft | $4^{\prime} 2^{\prime \prime} \times 24^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $1.25 \times 7.4 \times 0.18$ | 99.4 (9.3) | 86.4 (8.1) | 905 (411) | 16/180 | $2^{\prime \prime}-43^{\prime \prime}$ | 6200 |
| 180×90 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 2^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 0.81 \times 0.18$ | 14.1 (1.3) | 11.6 (1.2) | 125 (57) | 22/18 | $2^{\prime \prime}-57 \prime$ | 825 |
| 180×135 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 3^{\prime} 11^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 1.18 \times 0.18$ | 20.4 (1.9) | 17.3 (1.7) | 185 (84) | 22/27 | $2^{\prime \prime}$ - 57" | 1215 |
| $180 \times 180$ | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 5^{\prime} 11 \times 7^{\prime \prime}$ | $1.62 \times 1.54 \times 0.18$ | 26.8 (2.5) | 23.1 (2.3) | 245 (112) | 22/36 | 2" - 57" | 1610 |


| Lines x Columns | Sections/ Ventilated | Cabinet Dimensions Feet-Inches HxWxD | Cabinet Dimensions Meters HxWxD | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 180×225 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 6^{\prime} 3$ " $\times 7$ " | $1.62 \times 1.91 \times 0.18$ | 33.1 (3.1) | 28.8 (2.9) | 305 (139) | 22/45 | 2"-57" | 2000 |
| 180×270 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 7^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 2.28 \times 0.18$ | 39.5 (3.7) | 34.6 (3.3) | 365 (166) | 22/54 | 2"-57" | 2390 |
| $180 \times 315$ | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 8^{\prime \prime} 8^{\prime \prime} \times 7$ ' | $1.62 \times 2.64 \times 0.18$ | 45.8 (4.3) | 40.4 (3.9) | 425 (193) | 22/63 | 2"-57" | 2780 |
| 180×360 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 9^{\prime \prime} 11 \times 7$ " | $1.62 \times 3.01 \times 0.18$ | 52.2 (4.9) | 46.1 (4.5) | 485 (220) | 22/72 | 2" - 57" | 3170 |
| 180×405 | Sing/Ft | $55^{\prime \prime} \times 11^{\prime \prime} \times 7$ " | $1.62 \times 3.37 \times 0.18$ | 58.6 (5.5) | 51.9 (5.0) | 545 (248) | 22/81 | 2"-57" | 3560 |
| 180×450 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 12^{\prime \prime} 3^{\prime \prime} \times 7$ " | $1.62 \times 3.74 \times 0.18$ | 64.9 (6.1) | 57.6 (5.6) | 605 (275) | 22/90 | 2"-57" | 3950 |
| 180×495 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 13^{\prime \prime} 6^{\prime \prime} \times 7$ " | $1.62 \times 4.1 \times 0.18$ | 71.3 (6.6) | 63.4 (6.2) | 665 (302) | 22/99 | 2"-57" | 4340 |
| 180×540 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 14^{\prime} 8^{\prime \prime} \times 7{ }^{\prime \prime}$ | $1.62 \times 4.47 \times 0.18$ | 77.6 (7.2) | 69.2 (6.6) | 725 (329) | 22/108 | 2"-57" | 4730 |
| 180×585 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 15^{\prime} 111 \times 7$ " | $1.62 \times 4.84 \times 0.18$ | 84.0 (7.8) | 74.9 (7.2) | 785 (357) | 22/117 | 2"-57" | 5120 |
| $180 \times 630$ | Sing/Ft | $54^{\prime \prime} \times 17^{\prime \prime} 11 \times 7$ \% | $1.62 \times 5.2 \times 0.18$ | 90.4 (8.4) | 80.7 (7.8) | 845 (384) | 22/126 | 2"-57" | 5510 |
| $180 \times 675$ | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 18^{\prime \prime} 3^{\prime \prime} \times 7$ ' | $1.62 \times 5.57 \times 0.18$ | 96.7 (9.0) | 86.4 (8.3) | 905 (411) | 22/135 | 2"-57" | 5900 |
| 180×720 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 19^{\prime \prime} 6^{\prime \prime} \times 7{ }^{\prime \prime}$ | $1.62 \times 5.93 \times 0.18$ | 103.1 (9.6) | 92.2 (8.9) | 965 (438) | 22/144 | 2"-57" | 6295 |
| 180×765 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 20^{\prime \prime} 8^{\prime \prime} \times 7{ }^{\prime \prime}$ | $1.62 \times 6.3 \times 0.18$ | 109.4 (10.2) | 98.0 (9.5) | 1030 (468) | 22/153 | 2"-57" | 6685 |
| $180 \times 810$ | Sing/Ft | $5{ }^{\prime \prime} 4^{\prime} \times 21111 \times{ }^{\prime \prime}$ | $1.62 \times 6.66 \times 0.18$ | 115.8 (10.8) | 103.7 (9.9) | 1090 (495) | 22/162 | 2"-57" | 7075 |
| 180×855 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 23^{\prime \prime} 11 \times 7$ " | $1.62 \times 7.03 \times 0.18$ | 122.2 (11.4) | 109.5 (10.5) | 1150 (522) | 22/171 | 2"-57" | 7465 |
| 180×900 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 24^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 7.4 \times 0.18$ | 128.5 (12.0) | 115.2 (11.1) | 1210 (549) | 22/180 | 2"-57" | 7855 |
| 225×90 | Sing/Ft | $6^{\prime} 6^{\prime \prime} \times 2^{\prime \prime} 8^{\prime \prime} \times 7$ 7 | $1.99 \times 0.81 \times 0.18$ | 17.3 (1.6) | 14.4 (1.5) | 155 (71) | 28/18 | 2"-71" | 1020 |
| 225x135 | Sing/Ft | 6'6" $\times 3^{\prime} 111 \times 7$ " | $1.99 \times 1.18 \times 0.18$ | 25.0 (2.3) | 21.6 (2.1) | 230 (105) | 28/27 | 2"-72" | 1465 |
| 225x180 | Sing/Ft | 6'6" $\times 5^{\prime \prime 1} \times{ }^{\prime \prime}$ | $1.99 \times 1.54 \times 0.18$ | 32.8 (3.1) | 28.8 (2.9) | 305 (139) | 28/36 | 2'-72" | 1940 |
| $\underline{225 \times 225}$ | Sing/Ft | $6^{\prime} 6^{\prime \prime} \times 6^{\prime \prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $1.99 \times 1.91 \times 0.18$ | 40.6 (3.8) | 36.0 (3.6) | 380 (173) | 28/45 | 2'-72" | 2410 |
| 225x270 | Sing/Ft | $6^{\prime} 6^{\prime \prime} \times 7^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $1.99 \times 2.28 \times 0.18$ | 48.4 (4.5) | 43.2 (4.2) | 455 (207) | 28/54 | 2"-72" | 2885 |
| $\underline{225 \times 315}$ | Sing/Ft | $6^{\prime} 6^{\prime \prime} \times 8^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.99 \times 2.64 \times 0.18$ | 56.2 (5.3) | 50.4 (4.9) | 530 (241) | 28/63 | 2'-72" | 3355 |
| 225x360 | Sing/Ft | 6'6" $\times 9^{\prime} 111 \times 7$ " | $1.99 \times 3.01 \times 0.18$ | 64.0 (6.0) | 57.6 (5.7) | 605 (275) | 28/72 | 2'-72" | 3830 |
| $\underline{225 \times 405}$ | Sing/Ft | 6'6" $\times 1111 \times 7$ 1 | $1.99 \times 3.37 \times 0.18$ | 71.8 (6.7) | 64.8 (6.3) | 680 (309) | 28/81 | 2"-72" | 4305 |
| 225x450 | Sing/Ft | $6^{\prime \prime} 6^{\prime \prime} \times 12^{\prime 2} 3^{\prime \prime} \times 7{ }^{\prime \prime}$ | $1.99 \times 3.74 \times 0.18$ | 79.6 (7.4) | 72.0 (7.0) | 755 (343) | 28/90 | 2"-72" | 4775 |
| 225x495 | Sing/Ft | $6^{\prime} 6^{\prime \prime} \times 13^{\prime \prime} 6^{\prime \prime} \times 7{ }^{\prime \prime}$ | $1.99 \times 4.1 \times 0.18$ | 87.4 (8.2) | 79.2 (7.8) | 830 (377) | 28/99 | 2"-72" | 5250 |
| 225x540 | Sing/Ft | $6^{\prime} 6^{\prime \prime} \times 14^{\prime \prime} 8^{\prime \prime} \times 7$ 7 | $1.99 \times 4.47 \times 0.18$ | 95.2 (8.9) | 86.4 (8.4) | 905 (411) | 28/108 | 2'-72" | 5720 |
| 225x585 | Sing/Ft | $6^{\prime \prime} 6^{\prime \prime} \times 15^{\prime \prime} 111 \times 7$ ( | $1.99 \times 4.84 \times 0.18$ | 103.0 (9.6) | 93.6 (9.1) | 980 (445) | 28/117 | 2'-72" | 6195 |
| $225 \times 630$ | Sing/Ft | $6^{\prime \prime} 6^{\prime \prime} \times 17^{\prime \prime} 11 \times 7{ }^{\prime \prime}$ | $1.99 \times 5.2 \times 0.18$ | 110.8 (10.3) | 100.8 (9.9) | 1060 (481) | 28/126 | 2"-72" | 6670 |
| $\underline{225 \times 675}$ | Sing/Ft | $6^{\prime \prime} 6^{\prime \prime} \times 18^{\prime \prime} 3^{\prime \prime} \times 7{ }^{\prime \prime}$ | $1.99 \times 5.57 \times 0.18$ | 118.6 (11.1) | 108.0 (10.5) | 1135 (515) | 28/135 | 2"-72" | 7140 |
| 225x720 | Sing/Ft | $6^{\prime \prime} 6^{\prime \prime} \times 19^{\prime \prime} 6^{\prime \prime} \times 7$ 7 | $1.99 \times 5.93 \times 0.18$ | 126.4 (11.8) | 115.2 (11.2) | 1210 (549) | 28/144 | 2'-72" | 7615 |
| 225x765 | Sing/Ft | $6^{\prime \prime} 6^{\prime \prime} \times 20^{\prime \prime} 8^{\prime \prime} \times 7{ }^{\prime \prime}$ | $1.99 \times 6.3 \times 0.18$ | 134.2 (12.5) | 122.4 (12.0) | 1285 (583) | 28/153 | 2"-72" | 8090 |
| $\underline{225 \times 810}$ | Sing/Ft | 6'6' $\times 21$ 111" $\times 7$ " | $1.99 \times 6.66 \times 0.18$ | 142.0 (13.3) | 129.6 (12.5) | 1360 (617) | 28/162 | 2"-72" | 8560 |
| 225x855 | Sing/Ft | $6^{\prime \prime} 6^{\prime \prime} \times 23^{\prime \prime} 11 \times 7$ " | $1.99 \times 7.03 \times 0.18$ | 149.8 (14.0) | 136.8 (13.3) | 1435 (651) | 28/171 | 2"-72" | 9035 |
| 225x900 | Sing/Ft | $6^{\prime} 6^{\prime \prime} \times 24^{\prime} 3^{\prime \prime} \times 7^{\prime \prime}$ | $1.99 \times 7.4 \times 0.18$ | 157.6 (14.7) | 144.0 (14.1) | 1510 (685) | 28/180 | 2"-72" | 9505 |
| 270×90 | Sing/Ft | 7'9'× 2'8' $^{\prime \prime} \times$ 7' $^{\prime \prime}$ | $2.35 \times 0.81 \times 0.18$ | 20.5 (1.9) | 17.3 (1.8) | 185 (84) | 33/18 | 2"-86" | 1215 |
| 270x135 | Sing/Ft | 7'9'x $\times$ 3'11" $\times$ 7" | $2.35 \times 1.18 \times 0.18$ | 29.6 (2.8) | 26.0 (2.4) | 275 (125) | 33/27 | 2"-86" | 1715 |
| 270×180 | Sing/Ft | $77^{\prime \prime} \times 5^{\prime \prime 11} \times 7$ 年 | $2.35 \times 1.54 \times 0.18$ | 38.9 (3.6) | 34.6 (3.3) | 365 (166) | 33/36 | 2"-86" | 2270 |
| 270×225 | Sing/Ft |  | $2.35 \times 1.91 \times 0.18$ | 48.1 (4.5) | 43.2 (4.2) | 455 (207) | 33/45 | 2"-86" | 2825 |
| 270×270 | Sing/Ft |  | $2.35 \times 2.28 \times 0.18$ | 57.4 (5.4) | 51.9 (4.8) | 545 (248) | 33/54 | 2"-86" | 3380 |
| $\underline{270 \times 315}$ | Sing/Ft |  | $2.35 \times 2.64 \times 0.18$ | 66.6 (6.2) | 60.5 (5.7) | 635 (289) | 33/63 | $2^{\prime \prime}-86^{\prime \prime}$ | 3935 |
| $\underline{270 \times 360}$ | Sing/Ft | 7'9"x $\times$ 9'11" $\times 7$ " | $2.35 \times 3.01 \times 0.18$ | 75.8 (7.1) | 69.2 (6.6) | 725 (329) | 33/72 | 2"-86" | 4490 |
| $270 \times 405$ | Sing/Ft | 7'9"x $11111 \times 7$ - | $2.35 \times 3.37 \times 0.18$ | 85.1 (7.9) | 77.8 (7.3) | 815 (370) | 33/81 | 2"-86" | 5045 |
| 270x450 | Sing/Ft | 7'91× $\times 12^{\prime \prime} 3^{\prime \prime} \times 7$ 7 | $2.35 \times 3.74 \times 0.18$ | 94.3 (8.8) | 86.4 (8.1) | 905 (411) | 33/90 | $2^{\prime \prime}-86^{\prime \prime}$ | 5600 |
| 270x495 | Sing/Ft | $7{ }^{\prime \prime} 9^{\prime \prime} \times 13^{\prime \prime} 6^{\prime \prime} \times 7$ 7 | $2.35 \times 4.1 \times 0.18$ | 103.6 (9.6) | 95.1 (9.0) | 995 (452) | 33/99 | $2^{\prime \prime}-86^{\prime \prime}$ | 6160 |
| $\underline{270 \times 540}$ | Sing/Ft | $7{ }^{\prime \prime} \mathbf{\prime \prime}^{\prime \prime} \times 14^{\prime \prime} 8^{\prime \prime} \times 7$ ' | $2.35 \times 4.47 \times 0.18$ | 112.8 (10.5) | 103.7 (9.7) | 1090 (495) | 33/108 | 2"-86" | 6715 |
| $270 \times 585$ | Sing/Ft |  | $2.35 \times 4.84 \times 0.18$ | 122.0 (11.4) | 112.4 (10.6) | 1180 (536) | 33/117 | $2^{\prime \prime}-86^{\prime \prime}$ | 7270 |
| $270 \times 630$ | Sing/Ft | 7'9"x $17{ }^{\prime \prime} 11 \times 7$ - | $2.35 \times 5.2 \times 0.18$ | 131.3 (12.2) | 121.0 (11.4) | 1270 (577) | 33/126 | 2"-86" | 7825 |
| $270 \times 675$ | Sing/Ft | 7'9'x $\times 18^{\prime \prime} \mathbf{3 ' ~}^{\text {x }}$ 7 | $2.35 \times 5.57 \times 0.18$ | 140.5 (13.1) | 129.6 (12.1) | 1360 (617) | 33/135 | $2^{\prime \prime}-86{ }^{\prime \prime}$ | 8380 |
| 270x720 | Sing/Ft | $7{ }^{\prime \prime}{ }^{\prime \prime} \times 19^{\prime \prime} 6^{\prime \prime} \times 7$ ' | $2.35 \times 5.93 \times 0.18$ | 149.8 (13.9) | 138.3 (13.0) | 1450 (658) | 33/144 | $2^{\prime \prime}-86^{\prime \prime}$ | 8935 |
| 270×765 | Sing/Ft | $7{ }^{\prime \prime} \mathbf{\prime \prime}^{\prime \prime} \times 20^{\prime \prime} 8^{\prime \prime} \times 7$ 7 | $2.35 \times 6.3 \times 0.18$ | 159.0 (14.8) | 146.9 (13.9) | 1540 (699) | 33/153 | $2^{\prime \prime}-86{ }^{\prime \prime}$ | 9490 |
| $270 \times 810$ | Sing/Ft | 7'9'× $\times 21111 \times{ }^{\prime \prime}$ | $2.35 \times 6.66 \times 0.18$ | 168.2 (15.7) | 155.6 (14.5) | 1630 (740) | 33/162 | $2^{\prime \prime}-86^{\prime \prime}$ | 10050 |
| 270×855 | Sing/Ft | 7'9'x $\times 23^{\prime \prime \prime} \times$ " ${ }^{\prime \prime}$ | $2.35 \times 7.03 \times 0.18$ | 177.5 (16.5) | 164.2 (15.4) | 1720 (781) | 33/171 | $2^{\prime \prime}-86^{\prime \prime}$ | 10605 |
| 270×900 | Sing/Ft | $77^{\prime \prime} \times 24^{\prime \prime}{ }^{\prime \prime} \times 7$ ' | $2.35 \times 7.4 \times 0.18$ | 186.7 (17.4) | 172.8 (16.3) | 1810 (822) | 33/180 | $2^{\prime \prime}-86^{\prime \prime}$ | 11160 |
| $315 \times 180$ | Sing/Bk | $8^{\prime} 11$ " $\times 5^{\prime \prime} 4^{\prime \prime} \times 11{ }^{\prime \prime}$ | $2.72 \times 1.62 \times 0.28$ | 47.2 (4.4) | 40.4 (3.9) | 690 (313) | 39/36 | $2^{\prime \prime}-100$ | 2480 |
| $315 \times 225$ | Sing/Bk | $8^{\prime} 111 \times 6^{\prime \prime} 6^{\prime \prime} \times 11{ }^{\prime \prime}$ | $2.72 \times 1.99 \times 0.28$ | 57.9 (5.4) | 50.4 (4.9) | 780 (354) | 39/45 | $2^{\prime \prime}-100^{\prime \prime}$ | 3055 |
| $315 \times 270$ | Sing/Bk | $88^{\prime} 111 \times 7^{\prime \prime} \times 111$ | $2.72 \times 2.35 \times 0.28$ | 68.6 (6.4) | 60.5 (5.7) | 870 (395) | 39/54 | $2^{\prime \prime}$ - 100 " | 3635 |


| Lines x Columns | Sections/ Ventilated | Cabinet Dimensions Feet-Inches H x W x D | Cabinet Dimensions Meters HxWxD | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $315 \times 315$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 8^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 2.72 \times 0.28$ | 79.3 (7.4) | 70.6 (6.8) | 985 (447) | 39/63 | $2^{\prime \prime}-100^{\prime \prime}$ | 4275 |
| $315 \times 360$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 3.08 \times 0.28$ | 89.9 (8.4) | 80.7 (7.8) | 1075 (488) | 39/72 | $2^{\prime \prime}$ - 100' ${ }^{\prime \prime}$ | 4850 |
| $315 \times 405$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 3.45 \times 0.28$ | 100.6 (9.4) | 90.8 (8.6) | 1165 (529) | 39/81 | $2^{\prime \prime}$ - 100' | 5430 |
| $315 \times 450$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 3.81 \times 0.28$ | 111.3 (10.4) | 100.8 (9.6) | 1285 (583) | 39/90 | $2^{\prime \prime}$ - 100' ${ }^{\prime \prime}$ | 6070 |
| $315 \times 495$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 4.18 \times 0.28$ | 122 (11.4) | 110.9 (10.7) | 1375 (624) | 39/99 | $2^{\prime \prime}$ - 100'1 | 7185 |
| $315 \times 540$ | Sing/Bk | $8^{\prime} 111^{\prime \prime} \times 14^{\prime \prime} 11^{\prime \prime} \times 11{ }^{\prime \prime}$ | $2.72 \times 4.55 \times 0.28$ | 132.7 (12.4) | 121 (11.4) | 1460 (663) | 39/108 | $2^{\prime \prime}-100^{\prime \prime}$ | 7765 |
| $315 \times 585$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 4.91 \times 0.28$ | 143.3 (13.4) | 131.1 (12.5) | 1580 (717) | 39/117 | $2^{\prime \prime}$ - 100'1 | 8405 |
| $315 \times 630$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 5.28 \times 0.28$ | 154 (14.4) | 141.2 (13.5) | 1670 (758) | 39/126 | $2^{\prime \prime}$ - 100' | 8980 |
| $315 \times 675$ | Sing/Bk | $8^{\prime} 111^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 1{ }^{\prime \prime}$ | $2.72 \times 5.64 \times 0.28$ | 164.7 (15.3) | 151.2 (14.3) | 1760 (799) | 39/135 | $2^{\prime \prime}-100^{\prime \prime}$ | 9560 |
| $315 \times 720$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 6.01 \times 0.28$ | 175.4 (16.3) | 161.3 (15.3) | 1875 (851) | 39/144 | $2^{\prime \prime}$ - 100' ${ }^{\prime \prime}$ | 10200 |
| $315 \times 765$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 20^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 6.38 \times 0.28$ | 186.1 (17.4) | 171.4 (16.4) | 1965 (892) | 39/153 | $2^{\prime \prime}$ - $100^{\prime \prime}$ | 10775 |
| $315 \times 810$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 22^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 6.74 \times 0.28$ | 196.7 (18.3) | 181.5 (17.2) | 2055 (933) | 39/162 | $2^{\prime \prime}$ - 100' | 11355 |
| $315 \times 855$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 7.11 \times 0.28$ | 207.4 (19.3) | 191.6 (18.2) | 2275 (1032) | 39/171 | $2^{\prime \prime}$ - 100' | 11995 |
| $315 \times 900$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 7.47 \times 0.28$ | 218.1 (20.3) | 201.6 (19.2) | 2360 (1071) | 39/180 | $2^{\prime \prime}$ - 100' ${ }^{\prime \prime}$ | 12570 |
| $315 \times 945$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 7.84 \times 0.28$ | 228.8 (21.3) | 211.7 (20.0) | 2450 (1112) | 39/189 | $2^{\prime \prime}-100^{\prime \prime}$ | 13150 |
| $315 \times 990$ | Sing/Bk | $8^{\prime} 111^{\prime \prime} \times 26^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 8.2 \times 0.28$ | 239.5 (22.3) | 221.8 (21.1) | 2570 (1166) | 39/198 | $2^{\prime \prime}-100^{\prime \prime}$ | 13790 |
| $315 \times 1035$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 8.57 \times 0.28$ | 250.1 (23.3) | 231.9 (22.1) | 2660 (1207) | 39/207 | $2^{\prime \prime}$ - 100'1 | 14365 |
| $315 \times 1080$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 8.94 \times 0.28$ | 260.8 (24.3) | 242 (22.9) | 2745 (1246) | 39/216 | $2^{\prime \prime}-100^{\prime \prime}$ | 14945 |
| $315 \times 1125$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 9.3 \times 0.28$ | 271.5 (25.3) | 252 (23.9) | 2865 (1300) | 39/225 | $2^{\prime \prime}-100^{\prime \prime}$ | 15580 |
| $315 \times 1170$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 319^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 9.67 \times 0.28$ | 282.2 (26.3) | 262.1 (25.0) | 2955 (1341) | 39/234 | $2^{\prime \prime}$ - 100' ${ }^{\prime \prime}$ | 16160 |
| $315 \times 1215$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 32^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 10.03 \times 0.28$ | 292.9 (27.3) | 272.2 (25.7) | 3045 (1382) | 39/243 | $2^{\prime \prime}$ - 100' | 16740 |
| $315 \times 1260$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 10.4 \times 0.28$ | 303.5 (28.3) | 282.3 (26.8) | 3160 (1434) | 39/252 | $2^{\prime \prime}$ - $100^{\prime \prime}$ | 17375 |
| $315 \times 1305$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 10.76 \times 0.28$ | 314.2 (29.3) | 292.4 (27.8) | 3250 (1475) | 39/261 | $2^{\prime \prime}$ - 100'1 | 17955 |
| $315 \times 1350$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 366^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 11.13 \times 0.28$ | 324.9 (30.3) | 302.4 (28.6) | 3340 (1515) | 39/270 | $2^{\prime \prime}-100^{\prime \prime}$ | 18535 |
| $315 \times 1395$ | Sing/Bk | $8^{\prime} 11^{\prime \prime} \times 37^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $2.72 \times 11.5 \times 0.28$ | 335.6 (31.3) | 312.5 (29.6) | 3455 (1568) | 39/279 | $2^{\prime \prime}-100^{\prime \prime}$ | 19170 |
| $360 \times 180$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 1.62 \times 0.28$ | 53.6 (5.0) | 46.1 (4.5) | 745 (338) | 45/36 | $2^{\prime \prime}$ - $115^{\prime \prime}$ | 2810 |
| $360 \times 225$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 6^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 1.99 \times 0.28$ | 65.7 (6.1) | 57.6 (5.7) | 840 (382) | 45/45 | $2^{\prime \prime}$ - 115' | 3470 |
| $360 \times 270$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11{ }^{\prime \prime}$ | $3.08 \times 2.35 \times 0.28$ | 77.8 (7.2) | 69.2 (6.6) | 935 (425) | 45/54 | $2^{\prime \prime}$ - 115' | 4130 |
| $360 \times 315$ | Sing/Bk | $10^{\prime \prime}{ }^{\prime \prime} \times 8^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 2.72 \times 0.28$ | 89.9 (8.4) | 80.7 (7.8) | 1065 (484) | 45/63 | $2^{\prime \prime}$ - 115' | 4850 |
| $360 \times 360$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 3.08 \times 0.28$ | 102.1 (9.5) | 92.2 (9.0) | 1160 (527) | 45/72 | $2^{\prime \prime}$ - $115^{\prime \prime}$ | 5515 |
| $360 \times 405$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 3.45 \times 0.28$ | 114.2 (10.6) | 103.7 (9.9) | 1260 (572) | 45/81 | $2^{\prime \prime}$ - 115' | 6175 |
| $360 \times 450$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 3.81 \times 0.28$ | 126.3 (11.7) | 115.2 (11.1) | 1385 (629) | 45/90 | $2^{\prime \prime}$ - 115' | 7435 |
| $360 \times 495$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 4.18 \times 0.28$ | 138.4 (12.9) | 126.8 (12.3) | 1485 (674) | 45/99 | $2^{\prime \prime}-115^{\prime \prime}$ | 8095 |
| $360 \times 540$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 4.55 \times 0.28$ | 150.5 (14.0) | 138.3 (13.2) | 1580 (717) | 45/108 | $2^{\prime \prime}-115^{\prime \prime}$ | 8755 |
| $360 \times 585$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 4.91 \times 0.28$ | 162.7 (15.1) | 149.8 (14.4) | 1710 (776) | 45/117 | $2^{\prime \prime}-115^{\prime \prime}$ | 9475 |
| $360 \times 630$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 17^{\prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 5.28 \times 0.28$ | 174.8 (16.3) | 161.3 (15.6) | 1805 (819) | 45/126 | $2^{\prime \prime}-115^{\prime \prime}$ | 10140 |
| $360 \times 675$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 5.64 \times 0.28$ | 186.9 (17.4) | 172.8 (16.5) | 1900 (862) | 45/135 | $2^{\prime \prime}-115^{\prime \prime}$ | 10800 |
| $360 \times 720$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 6.01 \times 0.28$ | 199 (18.5) | 184.4 (17.7) | 2030 (921) | 45/144 | $2^{\prime \prime}$ - 115' | 11520 |
| $360 \times 765$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 20^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 6.38 \times 0.28$ | 211.1 (19.7) | 195.9 (18.9) | 2240 (1017) | 45/153 | $2^{\prime \prime}-115^{\prime \prime}$ | 12180 |
| $360 \times 810$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 22^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 6.74 \times 0.28$ | 223.3 (20.8) | 207.4 (19.8) | 2335 (1060) | 45/162 | $2^{\prime \prime}-115^{\prime \prime}$ | 12840 |
| $360 \times 855$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 7.11 \times 0.28$ | 235.4 (21.9) | 218.9 (21.0) | 2465 (1119) | 45/171 | $2^{\prime \prime}$ - 115' | 13560 |
| $360 \times 900$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 7.47 \times 0.28$ | 247.5 (23.0) | 230.4 (22.2) | 2560 (1162) | 45/180 | $2^{\prime \prime}-115^{\prime \prime}$ | 14225 |
| $360 \times 945$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 7.84 \times 0.28$ | 259.6 (24.1) | 242 (23.1) | 2655 (1205) | 45/189 | $2^{\prime \prime}-115^{\prime \prime}$ | 14885 |
| $360 \times 990$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 26^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 8.2 \times 0.28$ | 271.7 (25.3) | 253.5 (24.3) | 2785 (1264) | 45/198 | $2^{\prime \prime}-115^{\prime \prime}$ | 15605 |
| $360 \times 1035$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 8.57 \times 0.28$ | 283.9 (26.4) | 265 (25.5) | 2880 (1307) | 45/207 | $2^{\prime \prime}-115^{\prime \prime}$ | 16265 |
| $360 \times 1080$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 8.94 \times 0.28$ | 296 (27.5) | 276.5 (26.4) | 2980 (1352) | 45/216 | $2^{\prime \prime}-115^{\prime \prime}$ | 16925 |
| $360 \times 1125$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 9.3 \times 0.28$ | 308.1 (28.6) | 288 (27.6) | 3105 (1409) | 45/225 | $2^{\prime \prime}-115^{\prime \prime}$ | 17650 |
| $360 \times 1170$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 31^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 9.67 \times 0.28$ | 320.2 (29.8) | 299.6 (28.8) | 3205 (1454) | 45/234 | $2^{\prime \prime}$ - 115' | 18310 |
| $360 \times 1215$ | Sing/Bk | $10^{\prime \prime}{ }^{\prime \prime} \times 32^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 10.03 \times 0.28$ | 332.3 (30.9) | 311.1 (29.7) | 3300 (1497) | 45/243 | $2^{\prime \prime}-115^{\prime \prime}$ | 18970 |
| $360 \times 1260$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 10.4 \times 0.28$ | 344.5 (32.0) | 322.6 (30.9) | 3430 (1556) | 45/252 | $2^{\prime \prime}-115^{\prime \prime}$ | 19690 |
| $360 \times 1305$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 10.76 \times 0.28$ | 356.6 (33.1) | 334.1 (32.1) | 3525 (1599) | 45/261 | $2^{\prime \prime}-115^{\prime \prime}$ | 20350 |
| $360 \times 1350$ | Sing/Bk | $10^{\prime} 2^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 11.13 \times 0.28$ | 368.7 (34.3) | 345.6 (33.0) | 3620 (1643) | 45/270 | $2^{\prime \prime}-115^{\prime \prime}$ | 21010 |
| $360 \times 1395$ | Sing/Bk | $10^{\prime \prime} 2^{\prime \prime} \times 379^{\prime \prime} \times 11^{\prime \prime}$ | $3.08 \times 11.5 \times 0.28$ | 380.8 (35.4) | 357.2 (34.2) | 3750 (1701) | 45/279 | $2^{\prime \prime}-115^{\prime \prime}$ | 21735 |
| $405 \times 180$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 1.62 \times 0.28$ | 59.9 (5.6) | 51.9 (5.0) | 960 (436) | 50/36 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 3260 |
| $405 \times 225$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 66^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 1.99 \times 0.28$ | 73.5 (6.9) | 64.8 (6.3) | 1080 (490) | 50/45 | $2^{\prime \prime}$ - 129"' | 4005 |
| $405 \times 270$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 2.35 \times 0.28$ | 87.1 (8.1) | 77.8 (7.3) | 1195 (543) | 50/54 | $2^{\prime \prime}$ - 129'1 | 4745 |
| $405 \times 315$ | Multi/Bk | 11'4' $\times$ 8'11" $\times 11$ | $3.45 \times 2.72 \times 0.28$ | 100.6 (9.4) | 90.8 (8.6) | 1360 (617) | 50/63 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 5610 |


| Lines x Columns | Sections/ Ventilated | Cabinet Dimensions Feet-Inches H x W x D | Cabinet <br> Dimensions Meters HxWxD | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $405 \times 360$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11{ }^{\prime \prime}$ | $3.45 \times 3.08 \times 0.28$ | 114.2 (10.6) | 103.7 (9.9) | 1480 (672) | 50/72 | $2^{\prime \prime}$ - 129" | 6355 |
| $405 \times 405$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11{ }^{\prime \prime}$ | $3.45 \times 3.45 \times 0.28$ | 127.7 (11.9) | 116.7 (10.9) | 1595 (724) | 50/81 | $2^{\prime \prime}$ - 129'' | 7095 |
| $405 \times 450$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 1{ }^{\prime \prime}$ | $3.45 \times 3.81 \times 0.28$ | 141.3 (13.1) | 129.6 (12.2) | 1760 (799) | 50/90 | $2^{\prime \prime}$ - 129" | 7960 |
| $405 \times 495$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 13^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 4.18 \times 0.28$ | 154.9 (14.4) | 142.6 (13.5) | 1880 (853) | 50/99 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 8705 |
| $405 \times 540$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 4.55 \times 0.28$ | 168.4 (15.7) | 155.6 (14.5) | 1995 (905) | 50/108 | $2^{\prime \prime}$ - 129'' | 9450 |
| $405 \times 585$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 1{ }^{\prime \prime}$ | $3.45 \times 4.91 \times 0.28$ | 182 (16.9) | 168.5 (15.8) | 2160 (980) | 50/117 | $2^{\prime \prime}$ - 129' | 10310 |
| $405 \times 630$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 5.28 \times 0.28$ | 195.5 (18.2) | 181.5 (17.2) | 2280 (1035) | 50/126 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 11055 |
| $405 \times 675$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 11{ }^{\prime \prime}$ | $3.45 \times 5.64 \times 0.28$ | 209.1 (19.5) | 194.4 (18.2) | 2395 (1087) | 50/135 | $2^{\prime \prime}$ - 129'' | 12340 |
| $405 \times 720$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 6.01 \times 0.28$ | 222.7 (20.7) | 207.4 (19.5) | 2560 (1162) | 50/144 | $2^{\prime \prime}$ - 129' | 13200 |
| $405 \times 765$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 20^{\prime \prime 1} 1^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 6.38 \times 0.28$ | 236.2 (22.0) | 220.4 (20.8) | 2680 (1216) | 50/153 | $2^{\prime \prime}$ - 129'' | 13945 |
| $405 \times 810$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 22^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 6.74 \times 0.28$ | 249.8 (23.3) | 233.3 (21.8) | 2795 (1268) | 50/162 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 14690 |
| $405 \times 855$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 7.11 \times 0.28$ | 263.3 (24.5) | 246.3 (23.1) | 2960 (1343) | 50/171 | $2^{\prime \prime}$ - 129'' | 15555 |
| $405 \times 900$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 1{ }^{\prime \prime}$ | $3.45 \times 7.47 \times 0.28$ | 276.9 (25.8) | 259.2 (24.4) | 3080 (1398) | 50/180 | $2^{\prime \prime}$ - 129'' | 16295 |
| $405 \times 945$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 7.84 \times 0.28$ | 290.5 (27.0) | 272.2 (25.4) | 3195 (1450) | 50/189 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 17040 |
| $405 \times 990$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 26^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 8.2 \times 0.28$ | 304 (28.3) | 285.2 (26.7) | 3380 (1534) | 50/198 | $2^{\prime \prime}$ - 129'' | 17905 |
| $405 \times 1035$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 8.57 \times 0.28$ | 317.6 (29.6) | 298.1 (28.1) | 3500 (1588) | 50/207 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 18645 |
| $405 \times 1080$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 1{ }^{\prime \prime}$ | $3.45 \times 8.94 \times 0.28$ | 331.1 (30.8) | 311.1 (29.0) | 3615 (1640) | 50/216 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 19390 |
| $405 \times 1125$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 9.3 \times 0.28$ | 344.7 (32.1) | 324 (30.4) | 3780 (1715) | 50/225 | $2^{\prime \prime}$ - 129'' | 20255 |
| $405 \times 1170$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 31{ }^{\prime \prime}$ ' $\times 1{ }^{\prime \prime}$ | $3.45 \times 9.67 \times 0.28$ | 358.3 (33.4) | 337 (31.7) | 4035 (1831) | 50/234 | $2^{\prime \prime}$ - 129' | 20995 |
| $405 \times 1215$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 322^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 10.03 \times 0.28$ | 371.8 (34.6) | 350 (32.7) | 4150 (1883) | 50/243 | $2^{\prime \prime}$ - 129'' | 21740 |
| $405 \times 1260$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 10.4 \times 0.28$ | 385.4 (35.9) | 362.9 (34.0) | 4315 (1958) | 50/252 | $2^{\prime \prime}$ - 129'' | 22605 |
| $405 \times 1305$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 1{ }^{\prime \prime}$ | $3.45 \times 10.76 \times 0.28$ | 398.9 (37.1) | 375.9 (35.3) | 4435 (2012) | 50/261 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 23345 |
| $405 \times 1350$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 11.13 \times 0.28$ | 412.5 (38.4) | 388.8 (36.3) | 4550 (2064) | 50/270 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 24090 |
| $405 \times 1395$ | Multi/Bk | $11^{\prime \prime} 4^{\prime \prime} \times 37^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.45 \times 11.5 \times 0.28$ | 426.1 (39.7) | 401.8 (37.6) | 4715 (2139) | 50/279 | $2^{\prime \prime}$ - $129^{\prime \prime}$ | 24955 |
| $450 \times 180$ | Multi/Bk | $12^{\prime} 6^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 1.62 \times 0.28$ | 66.3 (6.2) | 57.6 (5.6) | 1015 (461) | 56/36 | $2^{\prime \prime}-144^{\prime \prime}$ | 3635 |
| $450 \times 225$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 66^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 1.99 \times 0.28$ | 81.3 (7.6) | 72 (7.0) | 1145 (520) | 56/45 | $2^{\prime \prime}-144^{\prime \prime}$ | 4460 |
| $450 \times 270$ | Multi/Bk | $12^{\prime} 6^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 2.35 \times 0.28$ | 96.3 (9.0) | 86.4 (8.1) | 1280 (581) | 56/54 | $2^{\prime \prime}-144^{\prime \prime}$ | 5285 |
| $450 \times 315$ | Multi/Bk | $12^{\prime \prime \prime} \times 8{ }^{\prime \prime} 11^{\prime \prime} \times 1{ }^{\prime \prime}$ | $3.81 \times 2.72 \times 0.28$ | 111.3 (10.4) | 100.8 (9.6) | 1450 (658) | 56/63 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 6230 |
| $450 \times 360$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 3.08 \times 0.28$ | 126.3 (11.7) | 115.2 (11.1) | 1580 (717) | 56/72 | $2^{\prime \prime}$ - $1444^{\prime \prime}$ | 7060 |
| $450 \times 405$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 3.45 \times 0.28$ | 141.3 (13.1) | 129.6 (12.2) | 1715 (778) | 56/81 | $2^{\prime \prime}$ - $144{ }^{\prime \prime}$ | 7885 |
| $450 \times 450$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 3.81 \times 0.28$ | 156.3 (14.5) | 144 (13.7) | 1880 (853) | 56/90 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 8830 |
| $450 \times 495$ | Multi/Bk | $12^{\prime} 6^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 4.18 \times 0.28$ | 171.3 (15.9) | 158.4 (15.2) | 2015 (914) | 56/99 | $2^{\prime \prime}-144^{\prime \prime}$ | 9655 |
| $450 \times 540$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 4.55 \times 0.28$ | 186.3 (17.3) | 172.8 (16.3) | 2150 (976) | 56/108 | $2^{\prime \prime}-144^{\prime \prime}$ | 10480 |
| 450x585 | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 4.91 \times 0.28$ | 201.3 (18.7) | 187.2 (17.8) | 2315 (1051) | 56/117 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 11430 |
| $450 \times 630$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 5.28 \times 0.28$ | 216.3 (20.1) | 201.6 (19.2) | 2450 (1112) | 56/126 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 12255 |
| $450 \times 675$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 5.64 \times 0.28$ | 231.3 (21.5) | 216 (20.4) | 2585 (1173) | 56/135 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 14160 |
| 450x720 | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 6.01 \times 0.28$ | 246.3 (22.9) | 230.4 (21.8) | 2750 (1248) | 56/144 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 15110 |
| $450 \times 765$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 20^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 6.38 \times 0.28$ | 261.3 (24.3) | 244.8 (23.3) | 2885 (1309) | 56/153 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 15935 |
| $450 \times 810$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 22^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 6.74 \times 0.28$ | 276.3 (25.7) | 259.2 (24.4) | 3020 (1370) | 56/162 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 16760 |
| 450x855 | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 7.11 \times 0.28$ | 291.3 (27.1) | 273.6 (25.9) | 3185 (1445) | 56/171 | $2^{\prime \prime}-144^{\prime \prime}$ | 17705 |
| 450x900 | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 7.47 \times 0.28$ | 306.3 (28.5) | 288 (27.4) | 3320 (1506) | 56/180 | $2^{\prime \prime}-144^{\prime \prime}$ | 18530 |
| $450 \times 945$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 7.84 \times 0.28$ | 321.3 (29.9) | 302.4 (28.5) | 3455 (1568) | 56/189 | $2^{\prime \prime}-144^{\prime \prime}$ | 19360 |
| $450 \times 990$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 26^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 8.2 \times 0.28$ | 336.3 (31.2) | 316.8 (30.0) | 3640 (1652) | 56/198 | $2^{\prime \prime}-144^{\prime \prime}$ | 20305 |
| $450 \times 1035$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 8.57 \times 0.28$ | 351.3 (32.7) | 331.2 (31.5) | 3775 (1713) | 56/207 | $2^{\prime \prime}-144^{\prime \prime}$ | 21130 |
| $450 \times 1080$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 8.94 \times 0.28$ | 366.3 (34.1) | 345.6 (32.6) | 3910 (1774) | 56/216 | $2^{\prime \prime}-144^{\prime \prime}$ | 21955 |
| $450 \times 1125$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 9.3 \times 0.28$ | 381.3 (35.4) | 360 (34.0) | 4075 (1849) | 56/225 | $2^{\prime \prime}-144^{\prime \prime}$ | 22900 |
| $450 \times 1170$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 31^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 9.67 \times 0.28$ | 396.3 (36.8) | 374.4 (35.5) | 4355 (1976) | 56/234 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 23730 |
| $450 \times 1215$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 32^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 10.03 \times 0.28$ | 411.3 (38.2) | 388.8 (36.6) | 4490 (2037) | 56/243 | $2^{\prime \prime}-144^{\prime \prime}$ | 24555 |
| $450 \times 1260$ | Multi/Bk | $12^{\prime} 6^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 10.4 \times 0.28$ | 426.3 (39.6) | 403.2 (38.1) | 4655 (2112) | 56/252 | $2^{\prime \prime}-144^{\prime \prime}$ | 25500 |
| $450 \times 1305$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 10.76 \times 0.28$ | 441.3 (41.0) | 417.6 (39.6) | 4790 (2173) | 56/261 | $2^{\prime \prime}$ - $144^{\prime \prime}$ | 26325 |
| $450 \times 1350$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 11.13 \times 0.28$ | 456.3 (42.4) | 432 (40.7) | 4925 (2234) | 56/270 | $2^{\prime \prime}-144^{\prime \prime}$ | 27150 |
| $450 \times 1395$ | Multi/Bk | $12^{\prime \prime} 6^{\prime \prime} \times 379^{\prime \prime} \times 11^{\prime \prime}$ | $3.81 \times 11.5 \times 0.28$ | 471.3 (43.8) | 446.4 (42.2) | 5090 (2309) | 56/279 | $2^{\prime \prime}-144^{\prime \prime}$ | 28100 |
| $495 \times 180$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 1.62 \times 0.28$ | 72.7 (6.8) | 63.4 (6.2) | 1080 (490) | 61/36 | $2^{\prime \prime}$ - $158^{\prime \prime}$ | 3965 |
| $495 \times 225$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 66^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 1.99 \times 0.28$ | 89.1 (8.3) | 79.2 (7.8) | 1225 (556) | 61/45 | $2^{\prime \prime}$ - $158^{\prime \prime}$ | 4875 |
| $495 \times 270$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 2.35 \times 0.28$ | 105.5 (9.8) | 95.1 (9.0) | 1365 (620) | 61/54 | $2^{\prime \prime}$ - 158' | 5780 |
| $495 \times 315$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 8^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 2.72 \times 0.28$ | 122 (11.4) | 110.9 (10.7) | 1550 (704) | 61/63 | $2^{\prime \prime}$ - 158'" | 6810 |
| $495 \times 360$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 3.08 \times 0.28$ | 138.4 (12.9) | 126.8 (12.3) | 1690 (767) | 61/72 | $2^{\prime \prime}-158^{\prime \prime}$ | 7720 |


| Lines x Columns | Sections/ Ventilated | Cabinet <br> Dimensions Feet-Inches H x W x D | Cabinet <br> Dimensions Meters HxWxD | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $495 \times 405$ | Multi/Bk | $13^{\prime \prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11$ | $4.18 \times 3.45 \times 0.28$ | 154.9 (14.4) | 142.6 (13.5) | 1835 (833) | 61/81 | $2^{\prime \prime}$ - 158' | 8630 |
| $495 \times 450$ | Multi/Bk | $13^{\prime} 9^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 3.81 \times 0.28$ | 171.3 (15.9) | 158.4 (15.2) | 2020 (917) | 61/90 | $2^{\prime \prime}$ - 158' | 9655 |
| $495 \times 495$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 4.18 \times 0.28$ | 187.7 (17.5) | 174.3 (16.8) | 2160 (980) | 61/99 | $2^{\prime \prime}$ - 158' | 10565 |
| $495 \times 540$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 14^{\prime \prime 111^{\prime \prime}} \times 11^{\prime \prime}$ | $4.18 \times 4.55 \times 0.28$ | 204.2 (19.0) | 190.1 (18.0) | 2300 (1044) | 61/108 | $2^{\prime \prime}$ - $158^{\prime \prime}$ | 11475 |
| $495 \times 585$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 4.91 \times 0.28$ | 220.6 (20.5) | 206 (19.7) | 2490 (1130) | 61/117 | $2^{\prime \prime}$ - 158' | 13045 |
| $495 \times 630$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 5.28 \times 0.28$ | 237.1 (22.1) | 221.8 (21.3) | 2630 (1193) | 61/126 | $2^{\prime \prime}$ - 158' | 13950 |
| $495 \times 675$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 5.64 \times 0.28$ | 253.5 (23.6) | 237.6 (22.6) | 2770 (1257) | 61/135 | $2^{\prime \prime}-158^{\prime \prime}$ | 15400 |
| $495 \times 720$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 6.01 \times 0.28$ | 269.9 (25.1) | 253.5 (24.2) | 2960 (1343) | 61/144 | $2^{\prime \prime}$ - 158' | 16430 |
| $495 \times 765$ | Multi/Bk | $13^{\prime \prime} \times 20^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 6.38 \times 0.28$ | 286.4 (26.7) | 269.3 (25.8) | 3100 (1407) | 61/153 | $2^{\prime \prime}$ - 158' | 17340 |
| $495 \times 810$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 22^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 6.74 \times 0.28$ | 302.8 (28.2) | 285.2 (27.1) | 3240 (1470) | 61/162 | $2^{\prime \prime}$ - 158' | 18245 |
| $495 \times 855$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 7.11 \times 0.28$ | 319.3 (29.7) | 301 (28.7) | 3430 (1556) | 61/171 | $2^{\prime \prime}$ - 158' | 19275 |
| $495 \times 900$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 7.47 \times 0.28$ | 335.7 (31.2) | 316.8 (30.3) | 3570 (1620) | 61/180 | $2^{\prime \prime}$ - 158' | 20185 |
| $495 \times 945$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 7.84 \times 0.28$ | 352.1 (32.8) | 332.7 (31.6) | 3710 (1683) | 61/189 | $2^{\prime \prime}-158^{\prime \prime}$ | 21095 |
| $495 \times 990$ | Multi/Bk | $13^{\prime \prime}{ }^{\prime \prime} \times 26^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 8.2 \times 0.28$ | 368.6 (34.3) | 348.5 (33.2) | 3915 (1776) | 61/198 | $2^{\prime \prime}$ - $158^{\prime \prime}$ | 22120 |
| $495 \times 1035$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 8.57 \times 0.28$ | 385 (35.8) | 364.4 (34.9) | 4060 (1842) | 61/207 | $2^{\prime \prime}-158^{\prime \prime}$ | 23030 |
| $495 \times 1080$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 8.94 \times 0.28$ | 401.5 (37.4) | 380.2 (36.1) | 4200 (1906) | 61/216 | $2^{\prime \prime}$ - 158' | 23940 |
| $495 \times 1125$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 9.3 \times 0.28$ | 417.9 (38.9) | 396 (37.7) | 4385 (1990) | 61/225 | $2^{\prime \prime}$ - 158' | 24965 |
| $495 \times 1170$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 311^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 9.67 \times 0.28$ | 434.3 (40.4) | 411.9 (39.4) | 4680 (2123) | 61/234 | $2^{\prime \prime}$ - 158' | 25875 |
| $495 \times 1215$ | Multi/Bk | $13^{\prime \prime}{ }^{\prime \prime} \times 32^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 10.03 \times 0.28$ | 450.8 (41.9) | 427.7 (40.6) | 4825 (2189) | 61/243 | $2^{\prime \prime}$ - 158' | 26785 |
| $495 \times 1260$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 10.4 \times 0.28$ | 467.2 (43.5) | 443.6 (42.2) | 5010 (2273) | 61/252 | $2^{\prime \prime}$ - 158' | 27815 |
| $495 \times 1305$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 10.76 \times 0.28$ | 483.7 (45.0) | 459.4 (43.9) | 5150 (2337) | 61/261 | $2^{\prime \prime}$ - 158' | 28720 |
| $495 \times 1350$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 11.13 \times 0.28$ | 500.1 (46.5) | 475.2 (45.1) | 5290 (2400) | 61/270 | $2^{\prime \prime}$ - 158' | 29630 |
| $495 \times 1395$ | Multi/Bk | $13^{\prime \prime} 9^{\prime \prime} \times 37^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.18 \times 11.5 \times 0.28$ | 516.5 (48.1) | 491.1 (46.7) | 5480 (2486) | 61/279 | $2^{\prime \prime}-158^{\prime \prime}$ | 30660 |
| $540 \times 180$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 5^{\prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 1.62 \times 0.28$ | 79 (7.4) | 69.2 (6.6) | 1135 (515) | 67/36 | $2^{\prime \prime}-172^{\prime \prime}$ | 4295 |
| $540 \times 225$ | Multi/Bk | $14^{\prime} 11{ }^{\prime \prime} \times 66^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 1.99 \times 0.28$ | 96.9 (9.1) | 86.4 (8.4) | 1290 (586) | 67/45 | $2^{\prime \prime}$ - 172' | 5285 |
| $540 \times 270$ | Multi/Bk | $14^{\prime} 11{ }^{\prime \prime} \times 7^{\prime \prime}{ }^{\prime \prime} \times 1{ }^{\prime \prime} \times 1{ }^{\prime \prime} \times 1{ }^{\prime \prime}$ | $4.55 \times 2.35 \times 0.28$ | 114.8 (10.7) | 103.7 (9.7) | 1450 (658) | 67/54 | $2^{\prime \prime}$ - 172' | 6280 |
| $540 \times 315$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 8$ 8 $111^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 2.72 \times 0.28$ | 132.7 (12.4) | 121 (11.4) | 1640 (744) | 67/63 | $2^{\prime \prime}$ - 172' | 7390 |
| 540×360 | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 3.08 \times 0.28$ | 150.5 (14.0) | 138.3 (13.2) | 1795 (815) | 67/72 | $2^{\prime \prime}$ - 172' | 8380 |
| $540 \times 405$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 3.45 \times 0.28$ | 168.4 (15.7) | 155.6 (14.5) | 1950 (885) | 67/81 | $2^{\prime \prime}$ - 172' ${ }^{\prime \prime}$ | 9370 |
| $540 \times 450$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 3.81 \times 0.28$ | 186.3 (17.3) | 172.8 (16.3) | 2140 (971) | 67/90 | $2^{\prime \prime}$ - 172' ${ }^{\prime \prime}$ | 10480 |
| $540 \times 495$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 4.18 \times 0.28$ | 204.2 (19.0) | 190.1 (18.0) | 2300 (1044) | 67/99 | $2^{\prime \prime}-172^{\prime \prime}$ | 11475 |
| 540×540 | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 4.55 \times 0.28$ | 222.1 (20.7) | 207.4 (19.4) | 2455 (1114) | 67/108 | $2^{\prime \prime}-172^{\prime \prime}$ | 12465 |
| $540 \times 585$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 4.91 \times 0.28$ | 239.9 (22.3) | 224.7 (21.1) | 2645 (1200) | 67/117 | $2^{\prime \prime}$ - 172' | 14655 |
| $540 \times 630$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 5.28 \times 0.28$ | 257.8 (24.0) | 242 (22.9) | 2805 (1273) | 67/126 | $2^{\prime \prime}-172^{\prime \prime}$ | 15650 |
| $540 \times 675$ | Multi/Bk | $14^{\prime} 11{ }^{\prime \prime} \times 18^{\prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 5.64 \times 0.28$ | 275.7 (25.7) | 259.2 (24.2) | 2960 (1343) | 67/135 | $2^{\prime \prime}-172^{\prime \prime}$ | 16640 |
| 540×720 | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 6.01 \times 0.28$ | 293.6 (27.3) | 276.5 (26.0) | 3150 (1429) | 67/144 | $2^{\prime \prime}$ - 172' | 17750 |
| $540 \times 765$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 20^{\prime \prime} 11^{\prime \prime} \times 1{ }^{\prime \prime}$ | $4.55 \times 6.38 \times 0.28$ | 311.5 (29.0) | 293.8 (27.7) | 3305 (1500) | 67/153 | $2^{\prime \prime}$ - 172' | 18740 |
| $540 \times 810$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 22^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 6.74 \times 0.28$ | 329.3 (30.7) | 311.1 (29.0) | 3465 (1572) | 67/162 | $2^{\prime \prime}$ - 172' | 19735 |
| $540 \times 855$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 7.11 \times 0.28$ | 347.2 (32.4) | 328.4 (30.8) | 3655 (1658) | 67/171 | $2^{\prime \prime}$ - 172' | 20845 |
| 540×900 | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 7.47 \times 0.28$ | 365.1 (34.0) | 345.6 (32.6) | 3810 (1729) | 67/180 | $2^{\prime \prime}-172^{\prime \prime}$ | 21835 |
| $540 \times 945$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 25^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 7.84 \times 0.28$ | 383 (35.7) | 362.9 (33.9) | 3970 (1801) | 67/189 | $2^{\prime \prime}-172^{\prime \prime}$ | 22830 |
| $540 \times 990$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 26^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 8.2 \times 0.28$ | 400.9 (37.3) | 380.2 (35.6) | 4175 (1894) | 67/198 | $2^{\prime \prime}-172^{\prime \prime}$ | 23940 |
| 540×1035 | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 8.57 \times 0.28$ | 418.7 (39.0) | 397.5 (37.4) | 4335 (1967) | 67/207 | $2^{\prime \prime}-172^{\prime \prime}$ | 24930 |
| $540 \times 1080$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 8.94 \times 0.28$ | 436.6 (40.7) | 414.8 (38.7) | 4490 (2037) | 67/216 | $2^{\prime \prime}-172^{\prime \prime}$ | 25920 |
| $540 \times 1125$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 9.3 \times 0.28$ | 454.5 (42.3) | 432 (40.5) | 4680 (2123) | 67/225 | $2^{\prime \prime}-172^{\prime \prime}$ | 27030 |
| $540 \times 1170$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 311^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 9.67 \times 0.28$ | 472.4 (44.0) | 449.3 (42.2) | 5000 (2268) | 67/234 | $2^{\prime \prime}$ - 172' | 28025 |
| $540 \times 1215$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 32{ }^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 10.03 \times 0.28$ | 490.3 (45.6) | 466.6 (43.6) | 5160 (2341) | 67/243 | $2^{\prime \prime}-172^{\prime \prime}$ | 29015 |
| $540 \times 1260$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 10.4 \times 0.28$ | 508.1 (47.3) | 483.9 (45.3) | 5350 (2427) | 67/252 | $2^{\prime \prime}-172^{\prime \prime}$ | 30125 |
| $540 \times 1305$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 10.76 \times 0.28$ | 526 (49.0) | 501.2 (47.1) | 5505 (2498) | 67/261 | $2^{\prime \prime}-172^{\prime \prime}$ | 31120 |
| $540 \times 1350$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 36^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 11.13 \times 0.28$ | 543.9 (50.6) | 518.4 (48.4) | 5665 (2570) | 67/270 | $2^{\prime \prime}-172^{\prime \prime}$ | 32110 |
| $540 \times 1395$ | Multi/Bk | $14^{\prime} 11^{\prime \prime} \times 37^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.55 \times 11.5 \times 0.28$ | 561.8 (52.3) | 535.7 (50.2) | 5855 (2656) | 67/279 | $2^{\prime \prime}-172^{\prime \prime}$ | 33220 |
| $585 \times 180$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 1.62 \times 0.28$ | 85.4 (8.0) | 74.9 (7.2) | 1205 (547) | 73/36 | $2^{\prime \prime}$ - 187" | 4625 |
| $585 \times 225$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 6^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 1.99 \times 0.28$ | 104.7 (9.8) | 93.6 (9.1) | 1370 (622) | 73/45 | $2^{\prime \prime}$ - 187' | 5700 |
| $585 \times 270$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 2.35 \times 0.28$ | 124 (11.5) | 112.4 (10.6) | 1540 (699) | 73/54 | $2^{\prime \prime}$ - 187" | 6775 |
| $585 \times 315$ | Multi/Bk | $16^{\prime \prime}{ }^{\prime \prime} \times 8^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 2.72 \times 0.28$ | 143.3 (13.4) | 131.1 (12.5) | 1745 (792) | 73/63 | 2' - 187" | 7970 |
| $585 \times 360$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 3.08 \times 0.28$ | 162.7 (15.1) | 149.8 (14.4) | 1915 (869) | 73/72 | $2^{\prime \prime}$ - 187' | 9040 |
| $585 \times 405$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 3.45 \times 0.28$ | 182 (16.9) | 168.5 (15.8) | 2080 (944) | 73/81 | $2^{\prime \prime}$ - 187' | 10115 |


| Lines x Columns | Sections/ Ventilated | Cabinet Dimensions Feet-Inches H x W x D | Cabinet <br> Dimensions Meters HxWxD | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $585 \times 450$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 111$ | $4.91 \times 3.81 \times 0.28$ | 201.3 (18.7) | 187.2 (17.8) | 2290 (1039) | 73/90 | $2^{\prime \prime}$ - 187" | 11310 |
| $585 \times 495$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 4.18 \times 0.28$ | 220.6 (20.5) | 206 (19.7) | 2455 (1114) | 73/99 | $2^{\prime \prime}-187^{\prime \prime}$ | 12925 |
| $585 \times 540$ | Multi/Bk | $16^{\prime \prime}{ }^{\prime \prime} \times 14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 4.55 \times 0.28$ | 239.9 (22.3) | 224.7 (21.1) | 2620 (1189) | 73/108 | $2^{\prime \prime}$ - 187' | 13995 |
| $585 \times 585$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 4.91 \times 0.28$ | 259.3 (24.1) | 243.4 (23.0) | 2830 (1284) | 73/117 | $2^{\prime \prime}-18{ }^{\prime \prime}$ | 15730 |
| $585 \times 630$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 5.28 \times 0.28$ | 278.6 (25.9) | 262.1 (25.0) | 2995 (1359) | 73/126 | 2' ${ }^{\prime \prime}$-187' | 16805 |
| $585 \times 675$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 5.64 \times 0.28$ | 297.9 (27.7) | 280.8 (26.4) | 3160 (1434) | 73/135 | $2^{\prime \prime}$ - 187' | 17880 |
| $585 \times 720$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 6.01 \times 0.28$ | 317.2 (29.5) | 299.6 (28.3) | 3370 (1529) | 73/144 | $2^{\prime \prime}$ - 187'' | 19070 |
| $585 \times 765$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 20^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 6.38 \times 0.28$ | 336.5 (31.3) | 318.3 (30.2) | 3535 (1604) | 73/153 | $2^{\prime \prime}$ - 187' | 20145 |
| $585 \times 810$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 22^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 6.74 \times 0.28$ | 355.9 (33.1) | 337 (31.7) | 3700 (1679) | 73/162 | $2^{\prime \prime}$ - 187' | 21220 |
| $585 \times 855$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 7.11 \times 0.28$ | 375.2 (34.9) | 355.7 (33.6) | 3910 (1774) | 73/171 | $2^{\prime \prime}-187^{\prime \prime}$ | 22415 |
| $585 \times 900$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 7.47 \times 0.28$ | 394.5 (36.7) | 374.4 (35.5) | 4075 (1849) | 73/180 | $2^{\prime \prime}$ - 187' | 23490 |
| $585 \times 945$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 7.84 \times 0.28$ | 413.8 (38.5) | 393.2 (37.0) | 4240 (1924) | 73/189 | $2^{\prime \prime}-187^{\prime \prime}$ | 24560 |
| $585 \times 990$ | Multi/Bk | $16^{\prime \prime}{ }^{\prime \prime} \times 26^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 8.2 \times 0.28$ | 433.1 (40.3) | 411.9 (38.9) | 4470 (2028) | 73/198 | $2^{\prime \prime}-18{ }^{\prime \prime}$ | 25755 |
| $585 \times 1035$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 8.57 \times 0.28$ | 452.5 (42.1) | 430.6 (40.8) | 4635 (2103) | 73/207 | $2^{\prime \prime}$ - 187' | 26830 |
| $585 \times 1080$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 8.94 \times 0.28$ | 471.8 (43.9) | 449.3 (42.2) | 4805 (2180) | 73/216 | $2^{\prime \prime}$ - 187' | 27905 |
| $585 \times 1125$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 9.3 \times 0.28$ | 491.1 (45.7) | 468 (44.2) | 5010 (2273) | 73/225 | $2^{\prime \prime}$ - 187' | 29095 |
| $585 \times 1170$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 31^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 9.67 \times 0.28$ | 510.4 (47.5) | 486.8 (46.1) | 5350 (2427) | 73/234 | $2^{\prime \prime}$ - 187' | 30170 |
| $585 \times 1215$ | Multi/Bk | $16^{\prime \prime}{ }^{\prime \prime} \times 32^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 10.03 \times 0.28$ | 529.7 (49.2) | 505.5 (47.5) | 5515 (2502) | 73/243 | $2^{\prime \prime}$ - 187' | 31245 |
| $585 \times 1260$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 10.4 \times 0.28$ | 549.1 (51.1) | 524.2 (49.4) | 5725 (2597) | 73/252 | $2^{\prime \prime}$ - 187' | 32440 |
| $585 \times 1305$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 10.76 \times 0.28$ | 568.4 (52.8) | 542.9 (51.4) | 5890 (2672) | 73/261 | $2^{\prime \prime}-187^{\prime \prime}$ | 33515 |
| $585 \times 1350$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 11.13 \times 0.28$ | 587.7 (54.6) | 561.6 (52.8) | 6060 (2749) | 73/270 | $2^{\prime \prime}$ - 187'' | 34590 |
| $585 \times 1395$ | Multi/Bk | $16^{\prime \prime} 2^{\prime \prime} \times 37^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $4.91 \times 11.5 \times 0.28$ | 607 (56.5) | 580.4 (54.7) | 6265 (2842) | 73/279 | $2^{\prime \prime}-187^{\prime \prime}$ | 35780 |
| $630 \times 180$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 1.62 \times 0.28$ | 91.7 (8.6) | 80.7 (7.8) | 1280 (581) | 78/36 | $2^{\prime \prime}-201$ " | 4955 |
| $630 \times 225$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 66^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 1.99 \times 0.28$ | 112.5 (10.5) | 100.8 (9.9) | 1455 (660) | 78/45 | $2^{\prime \prime}-201$ " | 6110 |
| $630 \times 270$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 2.35 \times 0.28$ | 133.3 (12.4) | 121 (11.4) | 1625 (738) | 78/54 | $2^{\prime \prime}-201$ " | 7270 |
| $630 \times 315$ | Multi/Bk | $17^{\prime} 4^{\prime \prime} \times 8^{\prime} 11^{\prime \prime} \times 1{ }^{\prime \prime}$ | $5.28 \times 2.72 \times 0.28$ | 154 (14.4) | 141.2 (13.5) | 1855 (842) | 78/63 | $2^{\prime \prime}-201$ " | 8545 |
| $630 \times 360$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 3.08 \times 0.28$ | 174.8 (16.3) | 161.3 (15.6) | 2030 (921) | 78/72 | $2^{\prime \prime}-201$ " | 9700 |
| $630 \times 405$ | Multi/Bk | $17^{\prime} 4^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 1{ }^{\prime \prime}$ | $5.28 \times 3.45 \times 0.28$ | 195.5 (18.2) | 181.5 (17.2) | 2205 (1001) | 78/81 | $2^{\prime \prime}-201$ " | 10860 |
| $630 \times 450$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 3.81 \times 0.28$ | 216.3 (20.1) | 201.6 (19.2) | 2435 (1105) | 78/90 | 2' -201 " | 12135 |
| $630 \times 495$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 4.18 \times 0.28$ | 237.1 (22.1) | 221.8 (21.3) | 2610 (1184) | 78/99 | $2^{\prime \prime}-201$ " | 14370 |
| $630 \times 540$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 4.55 \times 0.28$ | 257.8 (24.0) | 242 (22.9) | 2780 (1261) | 78/108 | $2^{\prime \prime}-201$ " | 15530 |
| $630 \times 585$ | Multi/Bk | $17^{\prime} 4^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 4.91 \times 0.28$ | 278.6 (25.9) | 262.1 (25.0) | 3010 (1366) | 78/117 | $2^{\prime \prime}-201$ " | 16805 |
| $630 \times 630$ | Multi/Bk | $17^{\prime} 4^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 5.28 \times 0.28$ | 299.3 (27.9) | 282.3 (27.0) | 3185 (1445) | 78/126 | 2" - 201" | 17960 |
| $630 \times 675$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 5.64 \times 0.28$ | 320.1 (29.8) | 302.4 (28.6) | 3360 (1525) | 78/135 | $2^{\prime \prime}-201$ " | 19120 |
| $630 \times 720$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 6.01 \times 0.28$ | 340.9 (31.7) | 322.6 (30.7) | 3590 (1629) | 78/144 | $2^{\prime \prime}-201$ " | 20395 |
| $630 \times 765$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 20^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 6.38 \times 0.28$ | 361.6 (33.7) | 342.8 (32.8) | 3765 (1708) | 78/153 | $2^{\prime \prime}-201$ " | 21550 |
| $630 \times 810$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 22^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 6.74 \times 0.28$ | 382.4 (35.6) | 362.9 (34.3) | 3940 (1788) | 78/162 | $2^{\prime \prime}-201$ " | 22710 |
| $630 \times 855$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 7.11 \times 0.28$ | 403.1 (37.5) | 383.1 (36.4) | 4165 (1890) | 78/171 | $2^{\prime \prime}-201$ " | 23985 |
| $630 \times 900$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 7.47 \times 0.28$ | 423.9 (39.4) | 403.2 (38.5) | 4340 (1969) | 78/180 | $2^{\prime \prime}-201$ " | 25140 |
| $630 \times 945$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 7.84 \times 0.28$ | 444.7 (41.4) | 423.4 (40.0) | 4515 (2048) | 78/189 | $2^{\prime \prime}-201$ " | 26295 |
| $630 \times 990$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 26^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 8.2 \times 0.28$ | 465.4 (43.3) | 443.6 (42.1) | 4765 (2162) | 78/198 | $2^{\prime \prime}-201$ " | 27575 |
| $630 \times 1035$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 8.57 \times 0.28$ | 486.2 (45.2) | 463.7 (44.2) | 4940 (2241) | 78/207 | $2^{\prime \prime}-201$ " | 28730 |
| $630 \times 1080$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 8.94 \times 0.28$ | 506.9 (47.2) | 483.9 (45.8) | 5115 (2321) | 78/216 | $2^{\prime \prime}-201$ " | 29885 |
| $630 \times 1125$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 9.3 \times 0.28$ | 527.7 (49.1) | 504 (47.8) | 5345 (2425) | 78/225 | $2^{\prime \prime}-201$ " | 31160 |
| $630 \times 1170$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 31^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 9.67 \times 0.28$ | 548.5 (51.1) | 524.2 (49.9) | 5700 (2586) | 78/234 | $2^{\prime \prime}-201$ " | 32320 |
| $630 \times 1215$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 32^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 10.03 \times 0.28$ | 569.2 (53.0) | 544.4 (51.5) | 5875 (2665) | 78/243 | $2^{\prime \prime}-201$ " | 33475 |
| $630 \times 1260$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 10.4 \times 0.28$ | 590 (54.9) | 564.5 (53.6) | 6105 (2770) | 78/252 | $2^{\prime \prime}-201$ " | 34750 |
| $630 \times 1305$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 10.76 \times 0.28$ | 610.7 (56.8) | 584.7 (55.6) | 6280 (2849) | 78/261 | $2^{\prime \prime}-201$ " | 35910 |
| $630 \times 1350$ | Multi/Bk | $17^{\prime \prime} 4^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 11.13 \times 0.28$ | 631.5 (58.8) | 604.8 (57.2) | 6450 (2926) | 78/270 | $2^{\prime \prime}-201$ " | 37065 |
| $630 \times 1395$ | Multi/Bk | $17^{\prime} 4^{\prime \prime} \times 379^{\prime \prime} \times 11^{\prime \prime}$ | $5.28 \times 11.5 \times 0.28$ | 652.3 (60.7) | 625 (59.3) | 6680 (3030) | 78/279 | $2^{\prime \prime}-201$ " | 38340 |
| $675 \times 180$ | Multi/Bk | $18^{\prime} 6^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 1.62 \times 0.28$ | 98.1 (9.1) | 86.4 (8.3) | 1330 (604) | 84/36 | $2^{\prime \prime}-216^{\prime \prime}$ | 5285 |
| $675 \times 225$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 6^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 1.99 \times 0.28$ | 120.3 (11.2) | 108 (10.5) | 1510 (685) | 84/45 | $2^{\prime \prime}-216^{\prime \prime}$ | 6525 |
| $675 \times 270$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 2.35 \times 0.28$ | 142.5 (13.3) | 129.6 (12.1) | 1695 (769) | 84/54 | $2^{\prime \prime}-216^{\prime \prime}$ | 7765 |
| $675 \times 315$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 8^{\prime \prime} 11^{\prime \prime} \times 1{ }^{\prime \prime}$ | $5.64 \times 2.72 \times 0.28$ | 164.7 (15.3) | 151.2 (14.3) | 1935 (878) | 84/63 | $2^{\prime \prime}-216^{\prime \prime}$ | 9125 |
| $675 \times 360$ | Multi/Bk | $18^{\prime} 6^{\prime \prime} \times 10^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 3.08 \times 0.28$ | 186.9 (17.4) | 172.8 (16.5) | 2115 (960) | 84/72 | $2^{\prime \prime}-216^{\prime \prime}$ | 10365 |
| $675 \times 405$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 1{ }^{\prime \prime}$ | $5.64 \times 3.45 \times 0.28$ | 209.1 (19.5) | 194.4 (18.2) | 2295 (1041) | 84/81 | $2^{\prime \prime}-216^{\prime \prime}$ | 11600 |
| $675 \times 450$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 12^{\prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 3.81 \times 0.28$ | 231.3 (21.5) | 216 (20.4) | 2535 (1150) | 84/90 | $2^{\prime \prime}-216^{\prime \prime}$ | 13500 |


| Lines x Columns | Sections/ Ventilated | Cabinet Dimensions Feet-Inches H x W x D | Cabinet <br> Dimensions Meters HxWxD | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $675 \times 495$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 13^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 4.18 \times 0.28$ | 253.5 (23.6) | 237.6 (22.6) | 2720 (1234) | 84/99 | $2^{\prime \prime}-216^{\prime \prime}$ | 15280 |
| $675 \times 540$ | Multi/Bk | $18^{\prime} 6^{\prime \prime} \times 14^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 4.55 \times 0.28$ | 275.7 (25.7) | 259.2 (24.2) | 2900 (1316) | 84/108 | $2^{\prime \prime}-216^{\prime \prime}$ | 16520 |
| $675 \times 585$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 4.91 \times 0.28$ | 297.9 (27.7) | 280.8 (26.4) | 3140 (1425) | 84/117 | $2^{\prime \prime}-216^{\prime \prime}$ | 17880 |
| $675 \times 630$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 5.28 \times 0.28$ | 320.1 (29.8) | 302.4 (28.6) | 3325 (1509) | 84/126 | $2^{\prime \prime}-216^{\prime \prime}$ | 19120 |
| $675 \times 675$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 5.64 \times 0.28$ | 342.3 (31.8) | 324 (30.3) | 3505 (1590) | 84/135 | $2^{\prime \prime}-216^{\prime \prime}$ | 20355 |
| 675×720 | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 6.01 \times 0.28$ | 364.5 (33.9) | 345.6 (32.5) | 3745 (1699) | 84/144 | $2^{\prime \prime}-216^{\prime \prime}$ | 21715 |
| $675 \times 765$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 20^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 6.38 \times 0.28$ | 386.7 (36.0) | 367.2 (34.7) | 3925 (1781) | 84/153 | $2^{\prime \prime}-216^{\prime \prime}$ | 22955 |
| 675×810 | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 22^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 6.74 \times 0.28$ | 408.9 (38.0) | 388.8 (36.3) | 4110 (1865) | 84/162 | $2^{\prime \prime}-216^{\prime \prime}$ | 24195 |
| $675 \times 855$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 7.11 \times 0.28$ | 431.1 (40.1) | 410.4 (38.5) | 4350 (1974) | 84/171 | $2^{\prime \prime}-216^{\prime \prime}$ | 25555 |
| $675 \times 900$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 7.47 \times 0.28$ | 453.3 (42.1) | 432 (40.7) | 4530 (2055) | 84/180 | $2^{\prime \prime}-216^{\prime \prime}$ | 26790 |
| $675 \times 945$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 25^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 7.84 \times 0.28$ | 475.5 (44.2) | 453.6 (42.4) | 4710 (2137) | 84/189 | $2^{\prime \prime}-216^{\prime \prime}$ | 28030 |
| 675×990 | Multi/Bk | $18^{\prime} 6^{\prime \prime} \times 26^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 8.2 \times 0.28$ | 497.7 (46.2) | 475.2 (44.6) | 4970 (2255) | 84/198 | $2^{\prime \prime}-216^{\prime \prime}$ | 29390 |
| $675 \times 1035$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 28^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 8.57 \times 0.28$ | 519.9 (48.3) | 496.8 (46.8) | 5155 (2339) | 84/207 | $2^{\prime \prime}-216^{\prime \prime}$ | 30630 |
| $675 \times 1080$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 8.94 \times 0.28$ | 542.1 (50.4) | 518.4 (48.4) | 5335 (2420) | 84/216 | $2^{\prime \prime}-216^{\prime \prime}$ | 31870 |
| $675 \times 1125$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 9.3 \times 0.28$ | 564.3 (52.5) | 540 (50.6) | 5575 (2529) | 84/225 | $2^{\prime \prime}-216^{\prime \prime}$ | 33230 |
| $675 \times 1170$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 31^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 9.67 \times 0.28$ | 586.5 (54.5) | 561.6 (52.8) | 5950 (2699) | 84/234 | $2^{\prime \prime}-216^{\prime \prime}$ | 34470 |
| $675 \times 1215$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 32^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 10.03 \times 0.28$ | 608.7 (56.6) | 583.2 (54.5) | 6130 (2781) | 84/243 | $2^{\prime \prime}-216^{\prime \prime}$ | 35705 |
| $675 \times 1260$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 10.4 \times 0.28$ | 630.9 (58.7) | 604.8 (56.7) | 6370 (2890) | 84/252 | $2^{\prime \prime}-216^{\prime \prime}$ | 37065 |
| $675 \times 1305$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 35^{\prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 10.76 \times 0.28$ | 653.1 (60.7) | 626.4 (58.9) | 6555 (2974) | 84/261 | $2^{\prime \prime}-216^{\prime \prime}$ | 38305 |
| $675 \times 1350$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 11.13 \times 0.28$ | 675.3 (62.8) | 648 (60.5) | 6735 (3055) | 84/270 | $2^{\prime \prime}-216^{\prime \prime}$ | 39545 |
| $675 \times 1395$ | Multi/Bk | $18^{\prime \prime} 6^{\prime \prime} \times 37^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $5.64 \times 11.5 \times 0.28$ | 697.5 (64.9) | 669.6 (62.7) | 6975 (3164) | 84/279 | $2^{\prime \prime}-216^{\prime \prime}$ | 40905 |
| $720 \times 180$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 5^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 1.62 \times 0.28$ | 104.5 (9.7) | 92.2 (8.9) | 1380 (626) | 90/36 | $2^{\prime \prime}-230^{\prime \prime}$ | 5615 |
| $720 \times 225$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 66^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 1.99 \times 0.28$ | 128.1 (12.0) | 115.2 (11.2) | 1570 (713) | 90/45 | $2^{\prime \prime}-230^{\prime \prime}$ | 6940 |
| $720 \times 270$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 7^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 2.35 \times 0.28$ | 151.7 (14.1) | 138.3 (13.0) | 1760 (799) | 90/54 | $2^{\prime \prime}-230^{\prime \prime}$ | 8260 |
| $720 \times 315$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 8^{\prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 2.72 \times 0.28$ | 175.4 (16.3) | 161.3 (15.3) | 2010 (912) | 90/63 | $2^{\prime \prime}-230^{\prime \prime}$ | 9700 |
| $720 \times 360$ | Multi/Bk | $19^{\prime \prime} \times 10^{\prime \prime} \times 1{ }^{\prime \prime} \times 1{ }^{\prime \prime}$ | $6.01 \times 3.08 \times 0.28$ | 199 (18.5) | 184.4 (17.7) | 2200 (998) | 90/72 | $2^{\prime \prime}-230^{\prime \prime}$ | 11025 |
| $720 \times 405$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 3.45 \times 0.28$ | 222.7 (20.7) | 207.4 (19.5) | 2390 (1085) | 90/81 | $2^{\prime \prime}-230^{\prime \prime}$ | 12345 |
| $720 \times 450$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 12^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 3.81 \times 0.28$ | 246.3 (22.9) | 230.4 (21.8) | 2640 (1198) | 90/90 | $2^{\prime \prime}$ - $230^{\prime \prime}$ | 14870 |
| $720 \times 495$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 13^{\prime \prime}{ }^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 4.18 \times 0.28$ | 269.9 (25.1) | 253.5 (24.2) | 2830 (1284) | 90/99 | $2^{\prime \prime}-230^{\prime \prime}$ | 16190 |
| $720 \times 540$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 14^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 4.55 \times 0.28$ | 293.6 (27.3) | 276.5 (26.0) | 3020 (1370) | 90/108 | $2^{\prime \prime}-230^{\prime \prime}$ | 17510 |
| $720 \times 585$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 16^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 4.91 \times 0.28$ | 317.2 (29.5) | 299.6 (28.3) | 3270 (1484) | 90/117 | $2^{\prime \prime}-230^{\prime \prime}$ | 18950 |
| $720 \times 630$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 17^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 5.28 \times 0.28$ | 340.9 (31.7) | 322.6 (30.7) | 3460 (1570) | 90/126 | $2^{\prime \prime}-230^{\prime \prime}$ | 20275 |
| $720 \times 675$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 18^{\prime \prime} 6^{\prime \prime} \times 111$ | $6.01 \times 5.64 \times 0.28$ | 364.5 (33.9) | 345.6 (32.5) | 3650 (1656) | 90/135 | $2^{\prime \prime}-230^{\prime \prime}$ | 21595 |
| $720 \times 720$ | Multi/Bk | 19'9' $\times 19^{\prime \prime} 9^{\prime \prime} \times 111$ | $6.01 \times 6.01 \times 0.28$ | 388.1 (36.1) | 368.7 (34.8) | 3900 (1770) | 90/144 | $2^{\prime \prime}$ - $230^{\prime \prime}$ | 23040 |
| $720 \times 765$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 20^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 6.38 \times 0.28$ | 411.8 (38.3) | 391.7 (37.2) | 4090 (1856) | 90/153 | $2^{\prime \prime}-230^{\prime \prime}$ | 24360 |
| $720 \times 810$ | Multi/Bk | $19^{\prime \prime \prime} \times 22^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 6.74 \times 0.28$ | 435.4 (40.5) | 414.8 (38.9) | 4280 (1942) | 90/162 | $2^{\prime \prime}-230^{\prime \prime}$ | 25680 |
| $720 \times 855$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 23^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 7.11 \times 0.28$ | 459.1 (42.7) | 437.8 (41.3) | 4530 (2055) | 90/171 | $2^{\prime \prime}-230^{\prime \prime}$ | 27120 |
| $720 \times 900$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 24^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 7.47 \times 0.28$ | 482.7 (44.9) | 460.8 (43.7) | 4720 (2141) | 90/180 | $2^{\prime \prime}-230^{\prime \prime}$ | 28445 |
| $720 \times 945$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 25^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 7.84 \times 0.28$ | 506.3 (47.1) | 483.9 (45.4) | 4905 (2225) | 90/189 | $2^{\prime \prime}-230^{\prime \prime}$ | 29765 |
| $720 \times 990$ | Multi/Bk | $19^{\prime \prime} 9^{\prime \prime} \times 26^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 8.2 \times 0.28$ | 530 (49.3) | 506.9 (47.8) | 5180 (2350) | 90/198 | $2^{\prime \prime}-230^{\prime \prime}$ | 31210 |
| $720 \times 1035$ | Multi/Bk | $19^{\prime \prime} \times 28^{\prime \prime} \times 1{ }^{\prime \prime} \times 1{ }^{\prime \prime}$ | $6.01 \times 8.57 \times 0.28$ | 553.6 (51.5) | 530 (50.2) | 5365 (2434) | 90/207 | $2^{\prime \prime}-230^{\prime \prime}$ | 32530 |
| $720 \times 1080$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 29^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 8.94 \times 0.28$ | 577.3 (53.7) | 553 (51.9) | 5555 (2520) | 90/216 | $2^{\prime \prime}-230^{\prime \prime}$ | 33850 |
| $720 \times 1125$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 30^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 9.3 \times 0.28$ | $600.9(55.9)$ | 576 (54.3) | 5805 (2634) | 90/225 | $2^{\prime \prime}-230^{\prime \prime}$ | 35295 |
| $720 \times 1170$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 311^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 9.67 \times 0.28$ | 624.5 (58.1) | 599.1 (56.6) | 6200 (2813) | 90/234 | $2^{\prime \prime}$ - 230' | 36615 |
| $720 \times 1215$ | Multi/Bk | 19'9' $\times 32^{\prime \prime} 11^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 10.03 \times 0.28$ | 648.2 (60.3) | 622.1 (58.4) | 6390 (2899) | 90/243 | $2^{\prime \prime}-230^{\prime \prime}$ | 37935 |
| $720 \times 1260$ | Multi/Bk | $19^{\prime \prime \prime} \times 34^{\prime \prime} 2^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 10.4 \times 0.28$ | 671.8 (62.5) | 645.2 (60.8) | 6640 (3012) | 90/252 | $2^{\prime \prime}-230^{\prime \prime}$ | 39380 |
| $720 \times 1305$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 35^{\prime \prime} 4^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 10.76 \times 0.28$ | 695.5 (64.7) | 668.2 (63.1) | 6830 (3099) | 90/261 | $2^{\prime \prime}-230^{\prime \prime}$ | 40700 |
| $720 \times 1350$ | Multi/Bk | $19^{\prime \prime}{ }^{\prime \prime} \times 36^{\prime \prime} 6^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 11.13 \times 0.28$ | 719.1 (66.9) | 691.2 (64.9) | 7015 (3182) | 90/270 | $2^{\prime \prime}-230^{\prime \prime}$ | 42020 |
| 720×1395 | Multi/Bk | 19'9' $\times 37^{\prime \prime} 9^{\prime \prime} \times 11^{\prime \prime}$ | $6.01 \times 11.5 \times 0.28$ | 742.7 (69.1) | 714.3 (67.3) | 7270 (3298) | 90/279 | $2^{\prime \prime}-230 \prime$ | 43465 |

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

### 1.2 SUMMARY

A. This Section includes monument - type signs with LED electronic message / sign panels.
B. Related Sections include the following:

1. Division 3 Section "Cast-in-Place Concrete" for concrete foundations and bases for monument- type signs.
2. Division 10 Section "Post and Panel Signs" for post-mounted signs.
3. Division 26 Sections for electrical service and connections for illuminated monument- type signs.

### 1.3 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide monument- type signs capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated, determined according to ASCE 7, "Minimum Design Loads for Buildings and Other Structures":

1. Wind Loads: Determine loads based on a uniform pressure of $25 \mathrm{lb} / \mathrm{sf}$, acting in any direction.
B. Thermal Movements: Provide monument- type signs that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
2. Temperature Change (Range): 120 deg $F(67$ deg C), ambient; 180 deg $F(100 \mathrm{deg} \mathrm{C})$, material surfaces.

### 1.4 SUBMITTALS

A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes. Include manufacturer's written instructions for maintaining and cleaning sign surfaces.
B. Shop Drawings: Show fabrication and installation details for monument- type signs.

1. Include plans, elevations, and at least 3/4-inch (1:20) scale sections of typical members and other components. Show anchors, reinforcement, accessories, layout, and installation details.
a. Show locations of electrical service connections.
2. Include message list, with details of wording and lettering layout, at least half size. Include full-size details of graphics.
a. Include full-size templates for cutout characters and graphic symbols.
3. Wiring Diagrams: For LED message boards.
C. Samples for Initial Selection: Manufacturer's color charts consisting of actual units or sections of units showing the full range of colors available for the following:
4. Aluminum.
5. Exposed exterior materials.

### 1.5 QUALITY ASSURANCE

A. Installer Qualifications: An authorized representative of sign manufacturer for installation and maintenance of units required for this Project.

1. Installer shall be capable of providing replacement message panels within 10 working days of receipt of order.
B. Source Limitations: Obtain monument- type signs through one source from a single manufacturer.
C. Product Options: Drawings indicate size, profiles, and dimensional requirements of monumenttype signs and are based on the types and features indicated. Refer to Division 1 Section "Product Requirements."
2. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

### 1.6 DELIVERY AND HANDLING

A. Deliver monument- type signs in protective covering and crating to protect sign components and surfaces against damage.

### 1.7 COORDINATION

A. Coordinate installation of anchorages for monument- type signs. Furnish setting drawings, templates, and directions for installing anchorages and other items that are to be embedded in concrete. Deliver such items to Project site in time for installation.
B. Coordinate delivery time so signs can be installed within 24 hours of receipt at Project site.

### 1.8 WARRANTY

A. Sign Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace panels that fail in materials or workmanship during specified warranty period. Failures include, but are not limited to, the following:

1. Coating degradation.
2. Chalking.
3. Fading.
4. Electronic controller circuit boards
5. LED panel assemblies
6. Power supplies, temperature sensor, and auto dimmer
7. Wires, plugs, and ribbon cables.
B. Warranty Period: 5 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

A. Aluminum Extrusions: ASTM B 221 (ASTM B 221 M ), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with at least the strength and durability properties of alloy 6063-T5.
B. Structural Steel (if steel is utilized in lieu of aluminum):

1. Hot-Rolled Structural-Steel Shapes: ASTM A 36/A 36M or ASTM A 529/A 529M.
2. Steel Tubing or Pipe: ASTM A 500, Grade B.
3. Steel Members Fabricated from Plate or Bar Stock: ASTM A 529/A 529M or ASTM A 572/A 572M, 42,000 psi ( 290 MPa ) minimum yield strength.
4. Bolts for Steel Framing: ASTM A 307 or ASTM A 325 (ASTM A 325M) as necessary for design loads and connection details.
5. For steel exposed to view on completion, provide materials selected for surface flatness, smoothness, and freedom from surface blemishes. Do not use materials whose surfaces exhibit pitting, seam marks, roller marks, rolled trade names, or roughness.

### 2.2 ACCESSORIES

A. Fasteners: Use concealed fasteners fabricated from metals that are noncorrosive to sign material and mounting surface.
B. Anchors and Inserts: Use stainless steel or hot-dip galvanized anchors and inserts. Use torquecontrolled expansion-bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete.

### 2.3 FABRICATION, GENERAL

A. General: Provide manufacturer's standard monument- type sign assembly consisting of LED message / sign boards supported on foundation-mounted, structural framing system. Provide sign to fit within surrounding context as indicated in drawings.

1. Welded Connections: Comply with AWS standards for recommended practices in shop welding. Provide welds behind finished surfaces without distortion or discoloration of exposed side. Clean exposed welded surfaces of welding flux and dress exposed and contact surfaces.
2. Mill joints to a tight, hairline fit. Form joints exposed to weather to exclude water penetration.
3. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in location not exposed to view after final assembly.
4. Conceal fasteners if possible; otherwise, locate fasteners where they will be inconspicuous.

### 2.4 STRUCTURE

A. Base: Provide monument- type signs with integral base consisting of channels, angles, plates, or other fittings. Drill holes in members for anchor-bolt connection.

1. Provide anchor bolts of size required for connecting base to concrete foundations.
B. Internal Frames: Manufacturer's standard internal aluminum framing system, designed to withstand wind pressure indicated. Cut, drill, and tap units to receive hardware, bolts, and similar items.

### 2.5 SIGN PANELS

A. General:

1. Coordinate dimensions and attachment methods to produce message panels with closely fitting joints. Align edges and surfaces with one another in the relationship indicated.
a. Modular Sign Panels: Provide message panels in replaceable, modular units as indicated.
b. Weatherproof: Provide assemblies and products which are weatherproof.
B. LED Message Boards: Basis-of-Design - Premier Series by MEGA LED Technology 888-315-7446 www.megasigninc.com/
C. Sign specifications (for Basis-of-Design sign):
2. Size: Approximately 3 foot $x 8$ foot; basis-of-Design is $3^{\prime}-1-3 / 4^{\prime \prime} \times 8$ ' $-4-3 / 4$ "
3. Resolution: 6 mm Surface Mounted Device.
4. Colors: 281 Trillion
5. Pixel Composition: 3 in 1
6. Viewing Angle: 160 Degrees
7. Contrast Ratio: 3000 : 1
8. Brightness: $>8,500$ NITS
9. LED Life-Span: $100,000 \mathrm{hrs}$
10. Operating Temperature: -40 F to +140 F
11. Graphic Capability: Text, Picture, Video (jpg, png, mp4, avi, mov)
12. Software: MEGA Cloud
13. Maintenance: Front Service
14. Certification: MET Lab / UL48, UL8750, UL1 433 CSA - C22.2 NO.207, FCC
15. Warranty: 5 year parts / factory lab

### 2.6 ALUMINUM FINISHES

A. Powder coat finishes.
B. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
C. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

A. Excavation: In firm, undisturbed or compacted soil, excavate sign foundation to dimensions indicated.
B. Set anchor bolts and other embedded items required for installation of signs. Use templates furnished by suppliers of items to be attached.
C. Install signs level, plumb, and at height indicated, with surfaces free from distortion or other defects in appearance.

### 3.2 CLEANING

A. At completion of installation, clean soiled surfaces of sign units according to manufacturer's written instructions.

## Bastrop High School Sign Study



Bastrop HS - Sign Variance 23-000937

| B3 Code Section | Description | Requested |
| :--- | :--- | :--- |
| $8.1 .009,(\mathrm{~b})-(4)-\mathrm{C} .+8.3-\mathrm{k})$ vi | Only external Illumination is <br> allowed | Internal illumination |
| $8.3-\mathrm{k})$ | Height -6 feet | Height -7 feet |
| $8.3-\mathrm{k})$ | Base max 2 feet | 2 Feet 6 Inches bases (including <br> concrete base if concrete is above <br> grade) |

Backlit Screen Specs.

## GALAXY ${ }^{\circledR}$ G16x 8 MM PRODUCT SPECIFICATIONS

| Lines X Columns | Sections/ Ventilated | Cabinet <br> Dimensions Feet-Inches HxWxD | Cabinet <br> Dimensions Meters $H \times W \times D$ | Cabinet Square Feet (Square Meters) | Active Area Square Feet (Square Meters) | Cabinet Weight Pounds (kilograms) | Lines/ Characters per line | Character Height | Maximum Watts RGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 180×225 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 66^{\prime \prime} \times 7$ " | $1.62 \times 1.91 \times 0.18$ | 33.1 (3.1) | 28.8 (2.9) | 305 (139) | 22/45 | 2"-57" | 2000 |
| 180×270 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 7^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 2.28 \times 0.18$ | 39.5 (3.7) | 34.6 (3.3) | 365 (166) | 22/54 | 2'-57" | 2390 |
| $180 \times 315$ | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 8^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 2.64 \times 0.18$ | 45.8 (4.3) | 40.4 (3.9) | 425 (193) | 22/63 | $2^{\prime \prime}-57{ }^{\prime \prime}$ | 2780 |
| 180×360 | Sing/Ft | $5^{\prime \prime} 4^{\prime \prime} \times 9^{\prime \prime} 11 \times 7$ " | $1.62 \times 3.01 \times 0.18$ | 52.2 (4.9) | 46.1 (4.5) | 485 (220) | 22/72 | $2^{\prime \prime}-57 \prime$ | 3170 |
| 180×405 | Sing/Ft | $54^{\prime \prime} \times 11^{\prime \prime} 11 \times 7$ " | $1.62 \times 3.37 \times 0.18$ | 58.6 (5.5) | 51.9 (5.0) | 545 (248) | 22/81 | 2'-57" | 3560 |
| 180×450 | Sing/Ft | $5{ }^{\prime \prime} 4^{\prime \prime} \times 12^{\prime} 3^{\prime \prime} \times 7$ " | $1.62 \times 3.74 \times 0.18$ | 64.9 (6.1) | 57.6 (5.6) | 605 (275) | 22/90 | 2"-57" | 3950 |
| 180×495 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 13^{\prime \prime} 6^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 4.1 \times 0.18$ | 71.3 (6.6) | 63.4 (6.2) | 665 (302) | 22/99 | 2" - 57" | 4340 |
| 180×540 | Sing/Ft | $5^{\prime} 4^{\prime \prime} \times 14^{\prime \prime} 8^{\prime \prime} \times 7^{\prime \prime}$ | $1.62 \times 4.47 \times 0.18$ | 77.6 (7.2) | 69.2 (6.6) | 725 (329) | 22/108 | $2^{\prime \prime}-57^{\prime \prime}$ | 4730 |
| 180×585 | Sing/Ft | $5{ }^{\prime \prime} 4^{\prime \prime} \times 15^{\prime \prime 11} \times 7$ " | $1.62 \times 4.84 \times 0.18$ | 84.0 (7.8) | 74.9 (7.2) | 785 (357) | 22/117 | 2" - 57" | 5120 |

## GT6x SERIES SPECIFICATIONS

## Estimated LED Lifetime:

100,000+ hours
Contrast Enhancement:
Non-reflective black louvers and module
face grooves disperse light
Message Capability:
Text, graphics, logos, basic animation, video clips, multiple font styles, and sizes
Control Software:
Venus ${ }^{\oplus}$ Control Suite
Power:
120, 120/240 VAC Single Phase
Display Dimming:
64 levels (Automatic, scheduled or manual control)
Communication Options:
Ethernet Fiber Optic, Ethernet Bridge Radio,
Remote Cellular, Ethernet CAT5
Operating Temperature:
$-40^{\circ} \mathrm{F}$ to $120^{\circ} \mathrm{F}$ with $99 \% \mathrm{RH}$ non-condensing
Compliance Information:
UL Listed, FCC compliance



P5 SPECIFICATIONS $\mathbf{v}$
a. Quantity: 1 max per Frontage
b. Height: 35 ft max. in P5 on SH 71 *see v

P

20 ft max in P5 on SH 95 \& Loop 150
6 ft max in P5
c. Max Height to width ratio: $4: 1$

A sign permanently affixed to the ground at its base or by poles that are enclosed by natural stone, stucco, brick, or wood and not mounted to a part of a Building. Pole(s) may be used to construct a Monument Sign so long as the poles are notvisible below the Sign.
i. A Monument Sign can be defined as a ground Sign generally having a low profile with little or no Open Space between the ground and the Sign and having a Structure constructed of masonry, wood, or materials similar in appearance.
ii. How to Measure:
(1) Maximum total Height is measured from the finished grade at the center of the Sign. If the finished grade at the center of the Sign is higher than the finished grade of the closest paved surface, then the Height shall be measured from the finished grade of the closest paved surface.
(2) The monument base shall be a maximum of 2 feet in Height and shall be included in the calculation of total Height.
(3) A Monument Sign width cannot exceed 2 times the allowable Sign Height.
iii. The max Height allowed along SH. 71 is 35 feet. Height limit is 8 feet if Band Sign Height exceeds 4 feet.
iv. The max Height allowed along Loop 150 and SH 95 is 20 feet. Height limit is 8 feet if Band Sign height exceeds 4 feet.
v. Signs along SH 71 , SH 95 and Loop 150 can be internally illuminated.
vi. A warrant for internal illumination can be requested.
vii. Cannot be located within a Sight Triangle.

## Section 8.2.003 Variances

(d) The ZBA may decide, subject to appropriate conditions, and only after a finding based on the evidence presented that strict compliance with the requirements of this Code will result in substantial undue hardship, sufficient mitigation, or inequity to the applicant without sufficient corresponding benefit to the City and its citizens in accomplishing the objectives of this Chapter.

The Sign Administrator and ZBA shall consider:
(1) Special or unique hardship because of the size or shape of the property on which the Sign is to be located, or the visibility of the property from public roads.
(2) Hardship claim based on the exceptional topographic conditions or physical features uniquely affecting the property on which a Sign is to be located.
(3) Proposed Sign location, configuration, design, materials and colors are harmonious.
(4) The Sign and its supporting structure is in architectural harmony with the surrounding Structures.
(5) Mitigation measures related to the Sign in question or other Signs on the same Premises.
(6) Demonstrated and documented correlation between the Variance and protecting the public health and safety.
(7) Whether the Sign could have been included in a Master Sign Plan. Master Sign plans are highly encouraged. The City will be more inclined to favorably consider a Variance request when the Variance is part of a Master Sign Plan. There will be a presumption against granting variances piecemeal, ad hoc, on a case-by-case basis when the Sign for which a Variance is sought could have
been included in a Master Sign Plan and considered in the course of a comprehensive review of the entire Project's signage.
(8) The Sign Administrator may authorize the remodeling, renovation, or alteration of a Sign when some nonconforming aspect of the Sign is thereby reduced.

MEETING DATE: February 20, 2024

## TITLE:

Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the internal illumination, for the Mina Elementary, located at 1203 Hill St, within the City Limits of the City of Bastrop, Texas.

## STAFF REPRESENTATIVE:

Kennedy Higgins, Senior Planner

## ITEM DETAILS:

Site Address:
Total Acreage:
1203 Hill St (Attachment 1)
Legal Description:
Property ID:
Property Owner:
Agent Contact:
Existing Use:
Existing Zoning:
Adopted Plan:
Future Land Use:
4.340 acres

Farm Lot 19 East Main Street 48030

Bastrop ISD
Lee Raspberry
School
Civic Space
N/A
Civic Space-School

## BACKGROUND/HISTORY:

The applicant is requesting a variance to allow for one thing that is not permitted under the adopted Chapter 8 - Signs.

It is to allow for illumination for one monument sign. Per Article 8.3 ( $k$ ) vand vi - monument signs located in the sign corridors of SH 95, SH 71, and loop 150 can be internally illuminated, but a warrant can be requested for signs located outside of corridors and the applicant has included that request in the overall variances requested.

The applicant's justification for the illumination of the sign is to allow for multiple announcements/messages to be displayed throughout the day.

## Bastrop Building Block (B3) Code

The Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code was adopted on November 12, 2019, and include Chapter 8 Signs. The applicant is asking for a variance to following standards:

Article 8.3 K) Monument Sign
a. Quantity: 1 max per Frontage
b. Height: $\quad 35 \mathrm{ft}$ max. in P5 on SH 71 *see v

20 ft max in P5 on SH 95 \& Loop 150
6 ft max in P5
c. Max Height to width ratio: $4: 1$

DESCRIPTION
A Sign permanently affixed to the ground at its base or by poles that are enclosed by natural stone, stucco, brick, or wood and not mounted to a part of a Building. Pole(s) may be used to construct a Monument Sign so long as the poles are not visible below the Sign.
SIGN DETAILS
i. A Monument Sign can be defined as a ground Sign generally having a low profile with little or no Open Space between the ground and the Sign and having a Structure constructed of masonry, wood, or materials similar in appearance.
ii. How to Measure:
(1) Maximum total Height is measured from the finished grade at the center of the Sign. If the finished grade at the center of the Sign is higher than the finished grade of the closest paved surface, then the Height shall be measured from the finished grade of the closest paved surface.
(2) The monument base shall be a maximum of 2 feet in Height and shall be included in the calculation of total Height.
(3) A Monument Sign width cannot exceed 2 times the allowable Sign Height.
iii. The max Height allowed along SH. 71 is 35 feet. Height limit is 8 feet if Band Sign Height exceeds 4 feet.
iv. The max Height allowed along Loop 150 and SH 95 is 20 feet. Height limit is 8 feet if Band Sign height exceeds 4 feet.

## v. Signs along SH 71, SH 95 and Loop 150 can be internally illuminated.

vi. A warrant for internal illumination can be requested.
vii. Cannot be located within a Sight Triangle.

## PUBLIC NOTIFICATION:

A newspaper notice was placed on February 7, 2024. Notifications were mailed to 31 adjacent property owners on February 6, 2024. At the time of this report, we have received no response.

## POLICY EXPLANATION:

## Texas Local Government Code

Sec. 211.009. AUTHORITY OF BOARD.
(a) The board of adjustment may:
(1) hear and decide an appeal that alleges error in an order, requirement, decision, or determination made by an administrative official in the enforcement of this subchapter or an ordinance adopted under this subchapter.
(2) hear and decide special exceptions to the terms of a zoning ordinance when the ordinance requires the board to do so.
(3) authorize in specific cases a variance from the terms of a zoning ordinance if the variance is not contrary to the public interest and due to special conditions, a literal enforcement of the ordinance would result in unnecessary hardship, and so that the spirit of the ordinance is observed, and substantial justice is done; and
(4) hear and decide other matters authorized by an ordinance adopted under this subchapter.
(b) In exercising its authority under Subsection (a)(1), the board may reverse or affirm, in whole or in part, or modify the administrative official's order, requirement, decision, or determination from which an appeal is taken and make the correct order, requirement, decision, or determination, and for that purpose the board has the same authority as the administrative official.
(b-1) In exercising its authority under Subsection (a)(3), the board may consider the following as grounds to determine whether compliance with the ordinance as applied to a structure that is the subject of the appeal would result in unnecessary hardship:
(1) the financial cost of compliance is greater than 50 percent of the appraised value of the structure as shown on the most recent appraisal roll certified to the assessor for the municipality under Section 26.01, Tax Code;
(2) compliance would result in a loss to the lot on which the structure is located of at least 25 percent of the area on which development may physically occur.
(3) compliance would result in the structure not being in compliance with a requirement of a municipal ordinance, building code, or other requirement.
(4) compliance would result in the unreasonable encroachment on an adjacent property or easement; or
(5) the municipality considers the structure to be a nonconforming structure.
(c) The concurring vote of 75 percent of the members of the board is necessary to:
(1) reverse an order, requirement, decision, or determination of an administrative official;
(2) decide in favor of an applicant on a matter on which the board is required to pass under a zoning ordinance; or
(3) authorize a variation from the terms of a zoning ordinance.

## Bastrop Building Block (B3) Code

## Section 8.2.003 Variances

(d) Other requests for variances shall be forwarded to the ZBA. The ZBA may decide, subject to appropriate conditions, and only after a finding based on the evidence presented that strict compliance with the CHAPTER 8: SIGNS 179 of 249 requirements of this Code will result in substantial undue hardship, sufficient mitigation, or inequity to the applicant without sufficient corresponding benefit to the City and its citizens in accomplishing the objectives of this Chapter.
The code allows for an administrative approval for setback, effective area, size of internal components of a Sign so long as total size of Sign Face is compliant, or Height
requirements, as well as to authorize one additional sign on premises more than allowed by this chapter, additionally a height increase of up to four (4) feet can be approved administratively, anything else will be the jurisdiction of the ZBA.

The Sign Administrator and ZBA shall consider:
(1) Special or unique hardship because of the size or shape of the property on which the Sign is to be located, or the visibility of the property from public roads.
(2) Hardship claim based on the exceptional topographic conditions or physical features uniquely affecting the property on which a Sign is to be located.
(3) Proposed Sign location, configuration, design, materials, and colors are harmonious.
(4) The Sign and its supporting structure is in architectural harmony with the surrounding Structures.
(5) Mitigation measures related to the Sign in question or other Signs on the same Premises.
(6) Demonstrated and documented correlation between the Variance and protecting the public health and safety.
(7) Whether the Sign could have been included in a Master Sign Plan. Master Sign plans are highly encouraged. The City will be more inclined to favorably consider a Variance request when the Variance is part of a Master Sign Plan. There will be a presumption against granting variances piecemeal, ad hoc, on a case-by-case basis when the Sign for which a Variance is sought could have been included in a Master Sign Plan and considered in the course of a comprehensive review of the entire Project's signage.
(8) The Sign Administrator may authorize the remodeling, renovation, or alteration of a Sign when some nonconforming aspect of the Sign is thereby reduced.

## RECOMMENDATION:

Public Hearing and consider action on variances from the Bastrop Building Block ( $\mathrm{B}^{3}$ ) Code, Chapter 8 - Signs, Article 8.3 (k) Monument Signs for the internal illumination, for the Mina Elementary School, located at 1203 Hill St, within the City Limits of the City of Bastrop, Texas

## ATTACHMENTS:

- Attachment 1: Location Map
- Attachment 2: Picture of Sign
- Attachment 3: Sign specifications
- Attachment 4: Bastrop Building Block (B3) Code Monument Sign Requirement
- Attachment 5: Blank Findings for Sec 8.2.003 Variances



## Mina Elementary LED Back Lit Sign



Building Code Exception Requested

| B3 Code Section | Description | Requested |
| :--- | :--- | :--- |
| 8.1.009, (b) -(4)-C. +8.3-k) vi | Only external Illumination is <br> allowed | Internal illumination |



Inside sign cabinet, is a 120VAC
standard base 300 lumens, 40-watt equivalent, (not to exceed) 3000K LED bulb controlled by timer.Is. pans.As conerisiene隹Aossixixex
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General notes - Exterior finsh ano color schedule:
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MINA ELEMENARY SCHOOL

EXTERIOR ELEVATIONS

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## Stantec

March 6, 2023
Project/File: 214000955
City of Bastrop - Planning Department
1311 Chestnut Street
Bastrop, TX 78602
To whom this may concern,

## Reference: Monument Permit - Mina Elementary School Additions and Renovations

Please accept this letter and accompanying exhibits as our application for a Sign Variance for the Mina Elementary School building addition/renovation project.

The project includes a monument sign (marquee sign) which overall dimensions are, $7^{\prime}-0$ " HT, 2'-6" depth and $12^{\prime}-8$ " long, the sign will be built with a reinforced CMU on top of concrete foundation, the finish is with two brick tones matching the main building, and cover with a precast concrete cap. In the middle the sign will have a $4^{\prime}-0$ " x $8^{\prime}-0$ " sign box and on top of the sign box will be the school logo.

This sign has already been constructed and just needs approval for an interior LED bulb to be used to illuminate the sign.

The checklist and all required exhibits for the Monument Permit can be found in the attachments of this submittal. Should you have any questions or concerns regarding this Monument Permit submittal, please do not hesitate to contact our office.

Regards,
STANTEC ARCHITECTURE INC.


## Amber O'Donnell Credentials

Principal
Phone: (512) 867-6012
aodonnell@stantec.com
Attachment: [AS001 - Architectural Site plan]


P5 SPECIFICATIONS $\mathbf{V}$
a. Quantity: 1 max per Frontage
b. Height: 35 ft max. in P5 on SH 71 *see v

P

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