IV. A.

690 Chesterfield Pkwy W ● Chesterfield MO 63017-0760
Phone: 636-537-4000 ● Fax 636-537-4798 ● www.chesterfield.mo.us

Architectural Review Board Staff Report

Project Type: Site Development Section Plan

Meeting Date: January 10, 2019

From: Cassie Harashe
Planner

Location: A 1.4 acre tract of land located at the northeast corner of the intersection of Chesterfield Parkway West and Hilltown Village Center.

Description: **Chesterfield Ridge Center, Parcel VIII, Building Group I Lot A (Kiddie Academy):** A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 1.4 acre tract of land zoned "C-8" Planned Commercial District located at the northeast corner of the intersection of Chesterfield Parkway West and Hilltown Village Center.

PROPOSAL SUMMARY

The request is for a 12,000 square foot daycare facility located at the northeast corner of the intersection of Chesterfield Parkway West and Hilltown Village Center. The subject site is zoned "C-8" Planned Commercial District and is governed under the terms and conditions of City of Chesterfield Ordinance Number 3026. The exterior building materials will primarily consist of brick with stone and EIFS accents. Rooftop-mounted mechanical equipment will be screened within the mechanical roof pit of the building's mansard roof and a trash enclosure will be six feet in height and match the color of the brick materials of the building's façade.

HISTORY OF SUBJECT SITE

The northwest and southwest quadrants of Olive / Clarkson and I-64 were included in the original presentation to the St. Louis County Planning Commission in 1971 to initiate development of Chesterfield Village. Prior to 1971, the land use and zoning pattern in the quadrants were "NU" and "R-3" with small commercial areas established adjacent to the offset intersections of Olive and Clarkson Roads with Highway 40 (now I-64). Commercial uses included four service stations, a small grocery store, a development company office, and a bank.

In 1971, Sachs Properties submitted fifteen separate petitions to initiate the development of Chesterfield Village. In 1979, Chesterfield Village Inc. submitted five new petitions covering a total of 197.8 acres in the northwest quadrant. Two general areas of "C-8" zoning were proposed, one along the north side of Highway 40 and the other surrounding the existing Hilltown Center. The 43.3 acres along Highway 40 would include 1,000,000 square feet of floor area being primarily offices, a hotel, theater, professional laboratories and schools. The 39.7 acres near Hilltown Center would include 500,000 square feet of building area, 150,000 of which is allocated to the subject area. In May 1998, the Homewood Suites, a 95,293 square foot hotel, was approved by the City of Chesterfield. The hotel is located on the northern portion of the subject site, and leaves 54,707 square feet to be developed. There has been no other development activity in the subject area.

The original petition has been amended several times over the years by both St. Louis County and the City of Chesterfield. In 2012, the City approved Ordinance 2723 which was to amend criteria for Parcel III, Building Groups A and B (this resulted in development of the new world headquarters for Reinsurance Group of America) and resulted in a new ordinance for the entire area. In 2016, an amendment was approved resulting in Ordinance 2916 that allowed for the development of the Pfizer project, currently under construction, across Chesterfield Parkway West from the subject site. Most recently, an Ordinance Amendment was approved by Ordinance 3026 for Parcel VIII, Building Group I that established development criteria for a day care to be developed on Lot A.

Figure 1: Aerial Site Photo

STAFF ANALYSIS

General Requirements for Site Design:

The subject site is located at the northeast corner of the intersection of Chesterfield Parkway West and Hilltown Village Center and is adjacent to commercial retail and service uses to the south across Hilltown Village Center. There is a hotel to the north and the Pfizer Research and Office Building is located to the west across Chesterfield Parkway West. The subject area is designated "Urban Core" within the City of Chesterfield's Comprehensive Land Use Plan, and the proposed development fits within its surrounding context, as it adjacent to other service, retail, and office establishments.

The location of the proposed building has frontage along both Chesterfield Parkway West and Hilltown Village Center. Chesterfield Parkway is classified as a minor arterial according to the City's functional classification system, and the south and west façades will be highly visible from a large number of users at the intersection. The east elevation will face future development on Lot B of Chesterfield Ridge Center, Parcel VIII, Building Group I, and the north elevation faces the Homewood Suites Hotel.The west and south elevations are facing Chesterfield Parkway West and Hilltown Village Center, respectively. The west elevation along Chesterfield Parkway West is screened by a 6' sight proof vinyl fence. This fence is located 30' from the property line, as outlined in red below. Further, a 4' black aluminum fence runs inside of the sight proof fence, separates the play area, and continues around the building as shown in blue below.

Figure 2: Color Site Development Section Plan

Circulation System and Access

The subject site will be served by a single access point on Hilltown Village Center near the southeast corner of the property. A cross access easement on Lot B of Parcel VIII, Building Group I provides cross access to Lot A and northwards to Lot C, Homewood Suites Hotel. Hilltown Village Center at this point is a privately maintained street. Per the Site Specific Ordinance, no access is permitted to this development from Chesterfield Parkway West. A sidewalk is already installed along the entire frontage on Chesterfield Parkway West, and a new sidewalk is to be installed along Hilltown Village Center as part of this development. Pedestrian access to the development will be provided near the vehicular entrance along Hilltown Village Center. This connection is proposed to extend onto the site across a designated area in the parking lot providing access to the building. There is also an internal sidewalk that circumnavigates the building.

Topography and Parking

The site is generally flat with only a few feet of grade change across the property. Bioretention/infiltration basins will be located northeast of the proposed building. All non-ADA proposed parking spaces are surfaced with porous concrete and are located to the south and east of the site between the building and the frontage of Hilltown Village Center and cross access connection to the east. Two ADA parking spaces are located nearest the primary entrance of the building.

General Requirements for Building Design:

This request is to allow for the development of a 12,000 square foot daycare facility on the subject property. The average roofline is 24' tall with an architectural feature that extends to 33' in height at its highest point and will contain space to provide daycare services up to a capacity of 341 children. An outdoor turf playground area is also proposed along the north and west side of the property to be screened with a 6-foot vinyl fence. There will be an additional four foot fence that circumnavigates the building. The four foot fence continues inside the sight proof fence around the play area and also divides the play area into different play yards for different aged children. The 4' tall fence proposed along the south and east sides of the building provides a secure walking path for the children to leave the classrooms in the front of the building and access to the play areas.

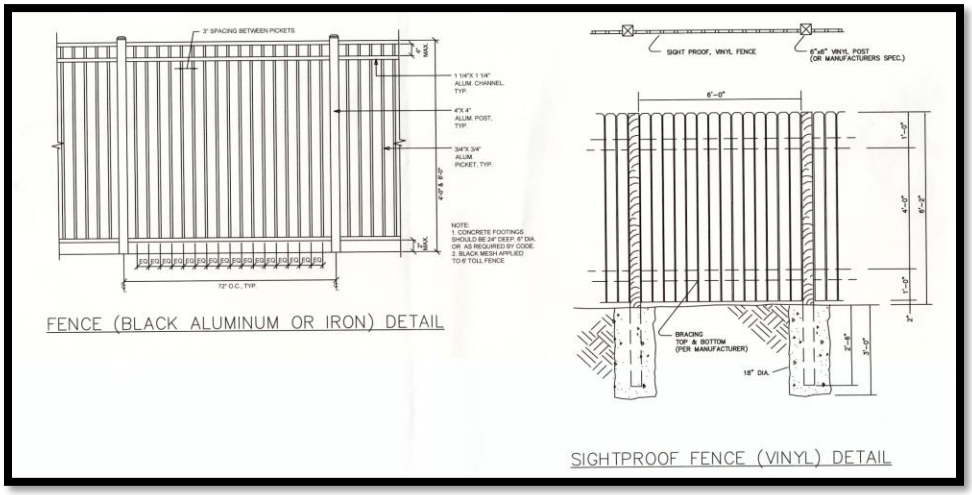


Figure 3: Proposed Fencing Details

A. Scale

The proposed building is a single story with an average height of 24', and 32' 6" in height at its highest point; the maximum building height for this development is 3 floors per the site specific ordinance. The buildings in the Hilltown Village Center to the south are constructed of red brick with off-white EIFS cornices and entablatures with pitched asphalt shingle roofs. The Homewood Suites Hotel to the north is constructed with off-white siding with a brick wainscoting at the ground level; it also has a pitched asphalt shingle roof. The proposed building complements these existing developments, by utilizing red brick, tan accents and a pitched mansard roof.

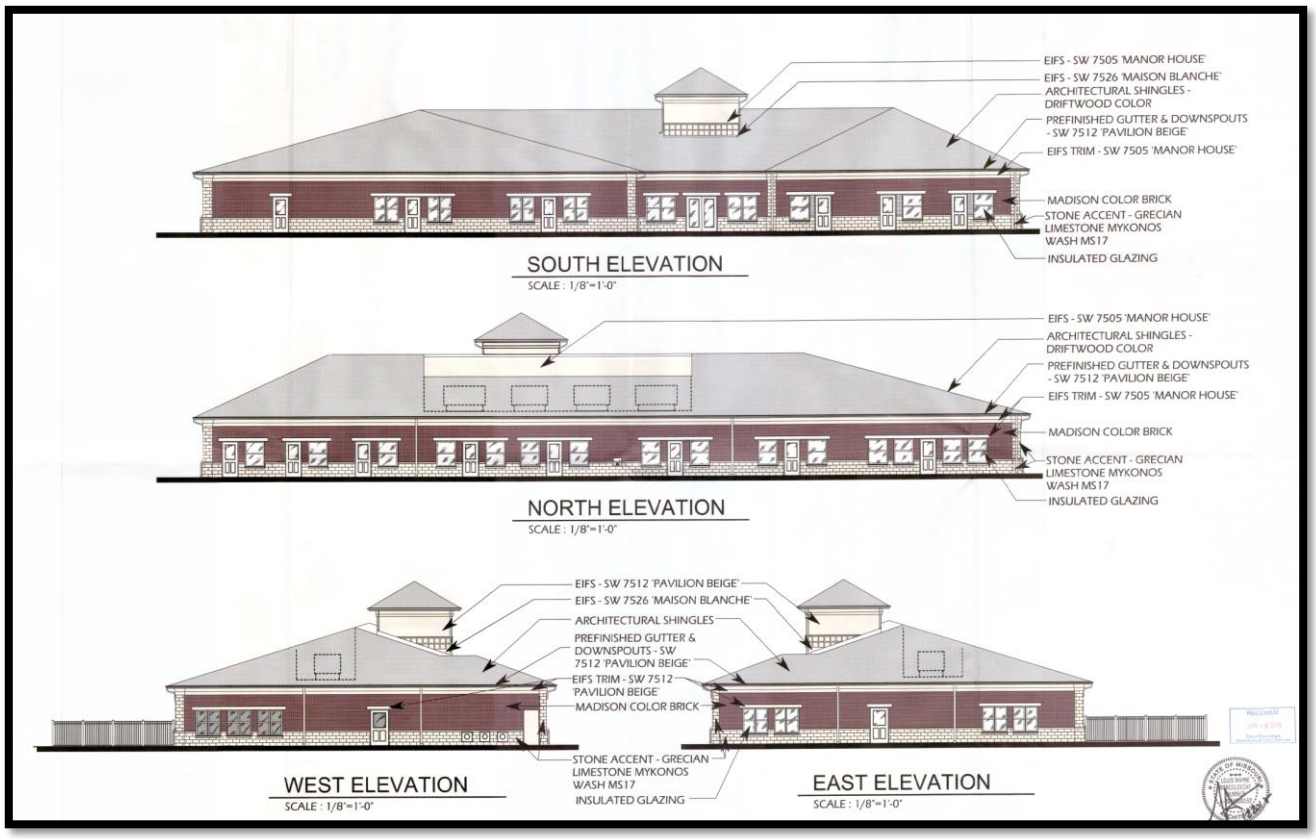


Figure 4: Color Exterior Elevations

B. Design

The Unified Development Code encourages that all façade's be treated similarly in regards to color, materials, architectural form and detailing. The applicant is proposing the primary exterior material of the building of Madison Color brick with EIFS, in three shades, Manor House, Pavilion Beige, and Maison Blanche and stone veneer in Grecian Limestone with Mykonos Wash for accents on all sides of the building. The north and west elevations are screened with a six foot vinyl fence that surrounds the playground space. Other architectural elements and materials of the building's design are included on all elevations, including the architectural asphalt shingles in Driftwood of the surrounding mansard roof. The Unified Development Code discourages linear repetitive streetscapes. The north, west, and east elevations have no articulation, and the south elevation's only articulation is a recess at the main entrance of the building.

The UDC encourages architectural details on facades at street level. The main entrance to the building will be located off of Hilltown Village Center, a privately maintained local street. The rendering point of view is from Hilltown Village near the entrance to the parking lot, again the architectural details of the west elevation along Chesterfield Parkway West, a minor arterial, will be screened by a six foot vinyl fence.

Figure 5: Proposed rendering view looking northwest from the parking lot.

C. Materials and Color

The exterior building materials will primarily consist of a red brick in Madison Color. A stone veneer in Grecian Limestone with Mykonos Wash will be used as an exterior wainscoting and in other accent areas. There is also EIFS trim on all four elevations, the EIFS is Pavilion Beige on the east and west elevations and Manor House on the north and south elevations. The surrounding mansard roof features architectural asphalt shingles in Driftwood, as well as an EIFS tower element, again in Pavilion Beige on the east and west elevations and Manor House on the north and south elevations.

D. Landscape Design and Screening

Several different areas of landscaping are proposed for the site. Street trees are proposed along the site's frontage of both Chesterfield Parkway West and Hilltown Village Center, as well as a landscape buffer. Landscaping is also proposed within the parking lot area, and another small planting area is proposed around the trash enclosure. The parking lot is screened with a hedgerow along the southern side.

The Unified Development Code requires the 30' landscape buffer along Chesterfield Parkway West to be planted with a combination of deciduous trees, evergreen trees, ornamental trees and shrubs and should enhance and preserve native vegetation.

Screening systems for the mechanical units and trash enclosure are proposed to match or be integrated within the building's design. Rooftop-mounted mechanical units are screened within the mechanical roof pit of the gray mansard roof, and the six-foot sight-proof trash enclosure features brick with a tan vinyl door to match the main structure.

The play area that wraps the west and north side of the building will be enclosed by a sight proof tan vinyl fence. However the applicant is also proposing several shade structures in this area that will be 14'8" in height. The applicant has not finalized their playground equipment selections, but they have included several options to give the Board an idea of the size and scope of type of equipment they wish to install for the children.

E. Signage
Signage is not part of the proposal before the Architectural Review Board and will be reviewed separately.

F. Lighting
Lighting is planned in association with the proposed development as required by the City of Chesterfield. The proposed lighting plan consists of fixtures proposed in the parking area and mounted on the building facades for navigating the site. All proposed exterior lighting will be fully shielded with cut off optics and will be directed down. In total, there are four proposed fixtures in the parking area and twenty-one wall-mounted fixtures across all four elevations of the building. A wall mounted light fixture is proposed above each entry way, with additional lights above the windows on the east and west elevations.

DEPARTMENT INPUT

Be advised, this project is still going through development review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff's report to the Planning Commission.

Staff requests review and recommendation on this submittal for Chesterfield Ridge Center, Parcel VIII, Building Group I, Lot A (Kiddie Academy).

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

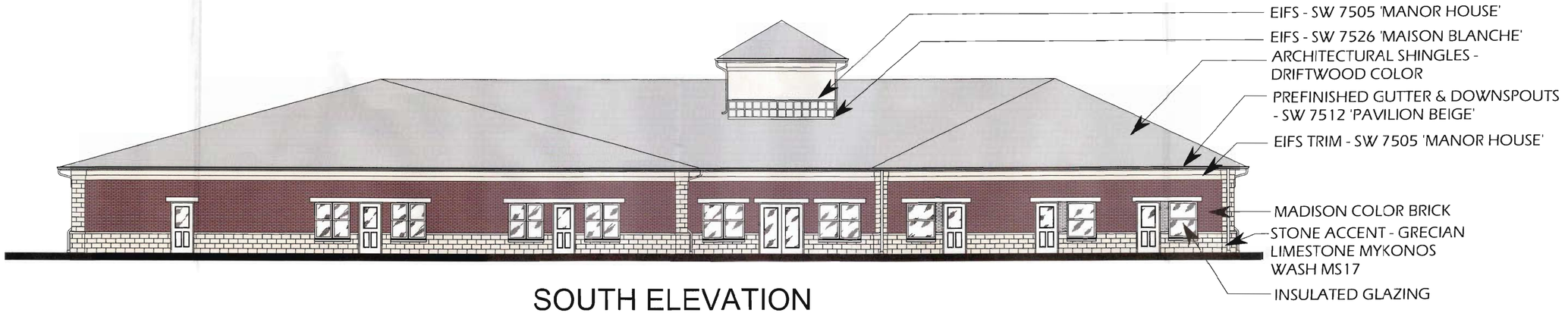
1) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Chesterfield Ridge Center, Parcel VIII, Building Group I, Lot A (Kiddie Academy) as presented, with a recommendation for approval (or denial) to the Planning Commission."

2) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Chesterfield Ridge Center,

Parcel VIII, Building Group I, Lot A (Kiddie Academy) to the Planning Commission with the following recommendations…"

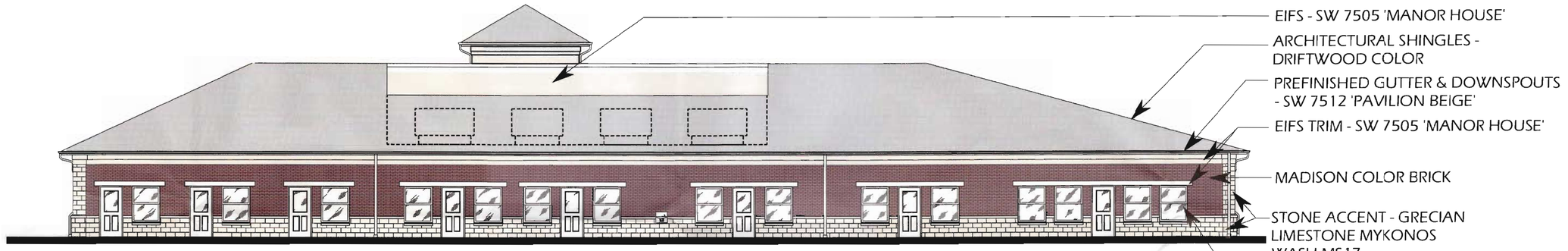
Attachments

1. Architectural Review Packet Submittal



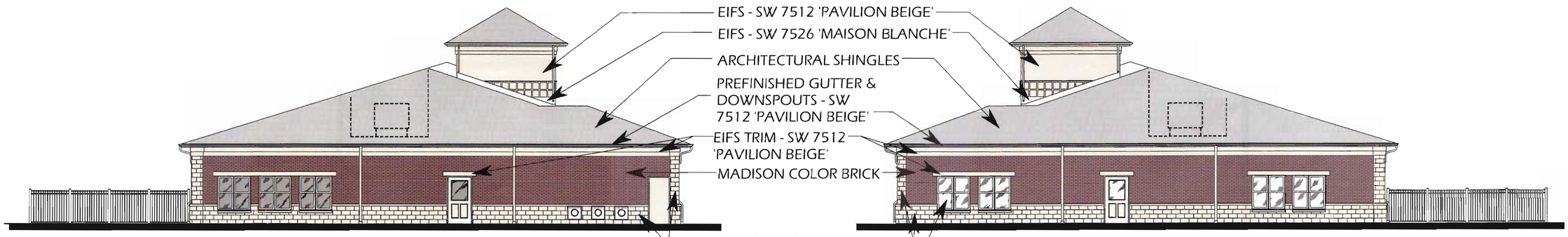
SOUTH ELEVATION

SCALE : 1/8"=1'-0"



NORTH ELEVATION

SCALE : 1/8"=1'-0"



WEST ELEVATION

SCALE : 1/8"=1'-0"

EAST ELEVATION

SCALE : 1/8"=1'-0"

RECEIVED
JAN – 9 2019
City of Chesterfield
Department of Public Services

STATE OF MISSOURI
LOUIS WAYNE VANDELOECHT
NUMBER
2014000152
ARCHITECT

KIDDIE ACADEMY®
EDUCATIONAL CHILD CARE

Kiddie Academy
Chesterfield, MO 63017

EXTERIOR ELEVATIONS

SCALE: 1/16" = 1'-0" (11x17)
1/8" – 1'-0" (24x36)

SJ1964

December 21, 2018

A1

ARCO MURRAY DESIGN BUILD

GMA ARCHITECTS

KIDDIE ACADEMY®
EDUCATIONAL CHILD CARE

Kiddie Academy
Chesterfield, MO 63017

EXTERIOR RENDERING
SJ1964 December 21, 2018

A2

ARCO MURRAY
DESIGN BUILD

GMA ARCHITECTS

STATE OF MISSOURI
LOUIS WAYNE VANDELOECHT
NUMBER A-2006000152
ARCHITECT

RECEIVED
JAN - 2 2019
City of Chesterfield
Department of Public Services

View from site looking Northwest

View from site looking Northeast

View from site looking Southwest

View from site looking Southeast

STATE OF MISSOURI
LOUIS WAYNE VANDELOECHT
NUMBER
2014000152
ARCHITECT

KIDDIE ACADEMY
EDUCATIONAL CHILD CARE

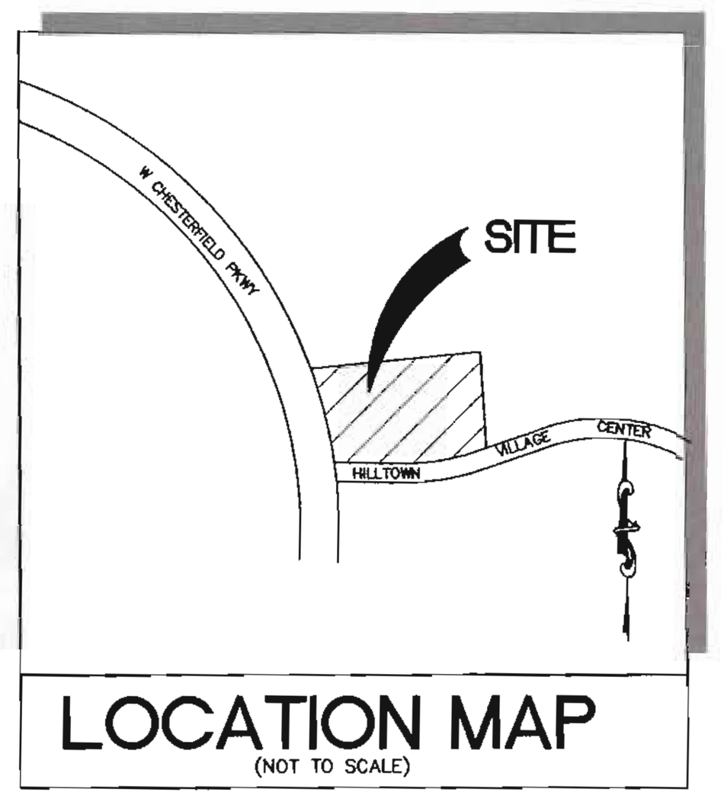
Kiddie Academy
Chesterfield, MO 63017

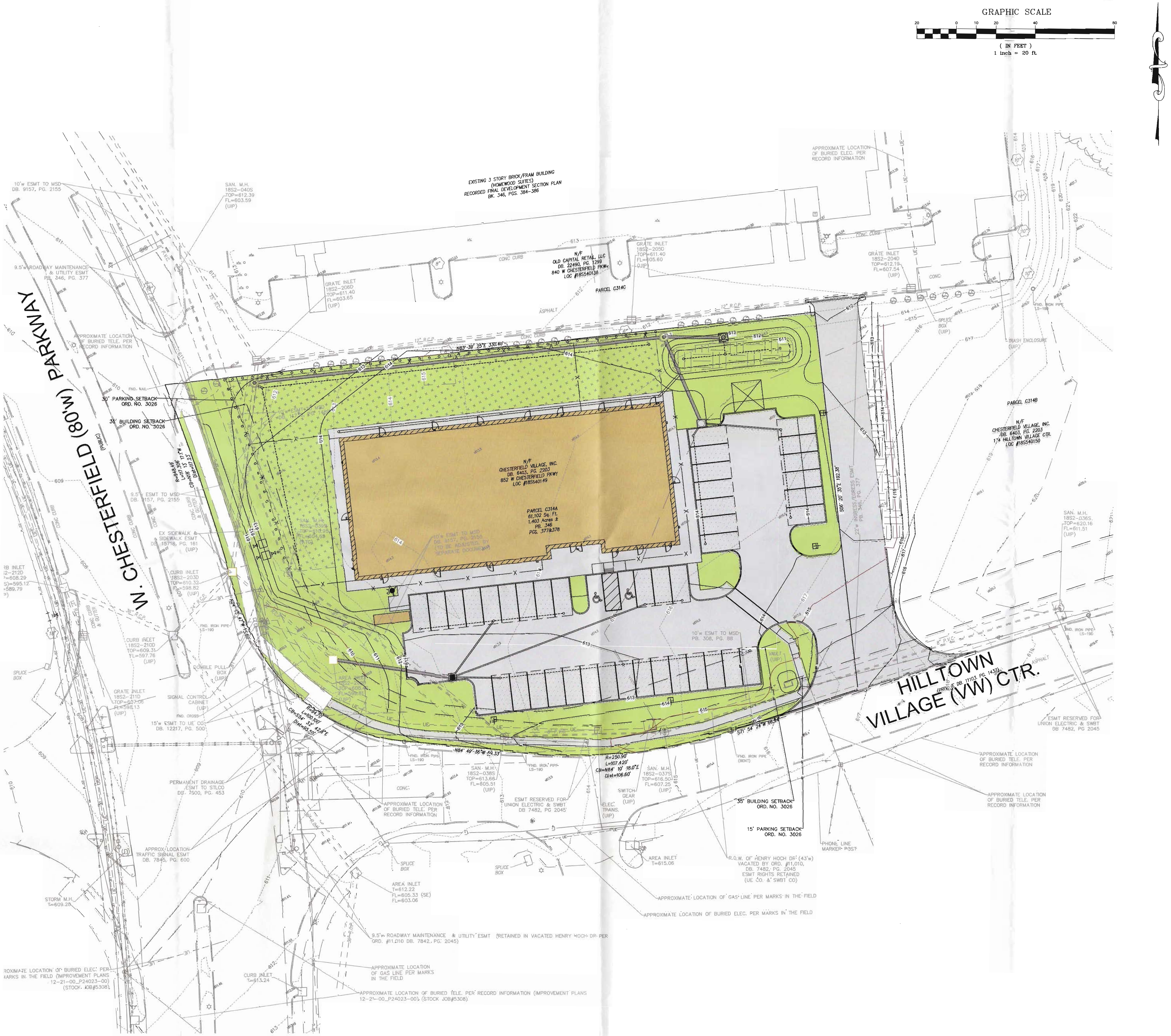
SITE PHOTOS
SJ1964 December 21, 2018

A3

ARCO MURRAY DESIGN BUILD

GMA ARCHITECTS





UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY WITH COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

PREPARED FOR:

ARCO CONSTRUCTION COMPANY
900 ROCK HILL ROAD
ST. LOUIS, MO 63119
PHONE: (314) 963-0715

PREPARED BY:

STOCK & ASSOCIATES Consulting Engineers, Inc.
257 Chesterfield Business Parkwa
St. Louis, MO 63005
PH. (636) 530-9100
FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE DEVELOPMENT PLAN

CHESTERFIELD VILLAGE, NORTHWEST QUADRANT, PARCEL C314A

WEST CHESTERFIELD PARKWAY
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

DATE:

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

1	12-20-18 CITY COMMENTS

RECEIVED
DEC 26 2018
City of Chesterfield
Department of Public Services

DRAWN BY: A.L.W.	CHECKED BY: G.M.S.
DATE: 11/13/2018	JOB NO.: 218-6322
M.S.D. P#: 18MSD-00572	BASE MAP #: 18S2
S.L.C. H&T #: 4478	H&T S.U.P. #: -
M.D.N.R. #: MO-00	

SHEET TITLE:

COLOR SITE PLAN

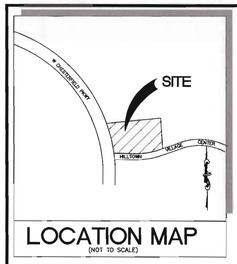
SHEET NO.:

00

SITE DEVELOPMENT SECTION PLAN

A TRACT OF LAND BEING LOT C314A OF CHESTERFIELD VILLAGE N.W. QUADRANT PARCEL C314
PER P.B. 346, PGS. 377 AND 378, LOCATED IN U.S. SURVEY 154, TOWNSHIP 45 NORTH, RANGE 4 EAST
OF THE 5TH PRINCIPAL MERIDIAN
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.



LOCATION MAP
(NOT TO SCALE)

SHEET INDEX

SITE INFORMATION

C314A:
OWNER (UNDER CONTRACT): KELLER VENTURES, LLC
ADDRESS: 852 W CHESTERFIELD PKWY CHESTERFIELD, MO 63017
LOT AREA: 1.403 Acres ±
LOCATOR NO: 18S540149
ORDINANCE NO: 3026

FIRE DISTRICT: MONARCH FIRE PROTECTION DISTRICT
SCHOOL DISTRICT: PARKWAY
SEWER DISTRICT: METROPOLITAN ST. LOUIS SEWER DIST.
WATER SHED: CHESTERFIELD
FEMA MAP: 29189C0145K
ELECTRIC COMPANY: AMEREN UE
GAS COMPANY: SPIRE
PHONE COMPANY: AT&T
WATER COMPANY: MISSOURI AMERICAN WATER COMPANY

OPENSPACE CALCULATIONS

TOTAL SITE AREA (LOT C314A): 61,102sf

BUILDING: 12,000 sf
VEHICLE PAVEMENT: 20,003 sf

PERCENT OPENSPACE:
[61,102 – (12,000+20,003) / 61,102] x 100% = 47.6%
(REQUIRED = 30% MIN)

F.A.R. CALCULATION

F.A.R. = 12,000 / 61,102 = 0.20
MAXIMUM = 0.55

BUILDING SETBACKS

PER ORDINANCE NO. 1266
FRONT: 20' BUILDING SETBACK
SIDES: 15' BUILDING SETBACK

PARKING CALCULATIONS

REQUIRED PARKING (MINIMUM):
DAY-CARE CENTER 3.0 SPACES PER 1,000 GROSS FLOOR AREA (3.0 x 12.0 = 36 SPACES)

TOTAL PERMITTED (MINIMUM): 36 SPACES

TOTAL PERMITTED (MAXIMUM):
DAY-CARE CENTER 4.0 SPACES PER 1,000 GROSS FLOOR AREA (4.0 x 12 = 48 SPACES)

TOTAL PERMITTED (MAXIMUM): 48 SPACES

PROPOSED TOTAL SPACES: 43 SPACES (2 ACCESSIBLE)

REQUIRED LOADING: NONE

FLOOD NOTE:

SUBJECT PROPERTY LIES WITHIN FLOOD ZONE "X" (AREA WITH REDUCED FLOOD RISK DUE TO LEVEE) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS. THE MAP IS IDENTIFIED AS MAP NO. 29189C0170K WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2015.

Keller Ventures, LLC, the owner under contract of the property shown on this plan for and in consideration of being granted approval of said plan to develop property under the provisions of

Section 03. , of City of Chesterfield

Unified Development Code, do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of ordinance of the City of Chesterfield Council.

by:_____

Keller Ventures, LLC

STATE OF MISSOURI)
) SS.
COUNTY OF ST. LOUIS)

On this _____ day of _____, A.D., 2018, before me personally appeared _____ (Officer of Corporation), to me known, who, being by me sworn in, did say that he/she is the _____ (Title) of _____ (Name of Corporation), a corporation in the State of _____, and that the seal affixed to the foregoing instruments is the corporate seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said _____ (Officer of Corporation) acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Notarial Seal at my Office in _____ (County and State), the day and year last above written.

_____
Notary Public

_____
Print Name

My commission expires: _____

This Site Development Section Plan was approved by the City of Chesterfield Director of Planning and Development and duly verified on the _____ day of _____, 2018, by the Director, authorizing the recording of this Site Development Section Plan pursuant to Chesterfield Ordinance No. 200, as attested to by the Director of Planning and Development Services.

By: _____
Justin Wyse, Director of Planning and Development Services
City of Chesterfield, MO

By: _____
Vickie Hass, City Clerk
City of Chesterfield, MO

DESCRIPTION:

PARCEL 1:
LOT C314A OF THE PLAT OF CHESTERFIELD VILLAGE NORTHWEST QUADRANT PARCEL C314 RECORDED IN PLAT BOOK 346, PAGES 377 AND 378, OF THE ST. LOUIS COUNTY, MISSOURI, RECORDS.

PARCEL 2:
NON-EXCLUSIVE 22 FOOT WIDE INGRESS/EGRESS EASEMENT AS SHOWN ON THE PLAT OF CHESTERFIELD VILLAGE NORTHWEST QUADRANT PARCEL C314 RECORDED IN PLAT BOOK 346, PAGES 377 AND 378, OF THE ST. LOUIS COUNTY, MISSOURI, RECORDS.

SURVEYOR'S CERTIFICATION

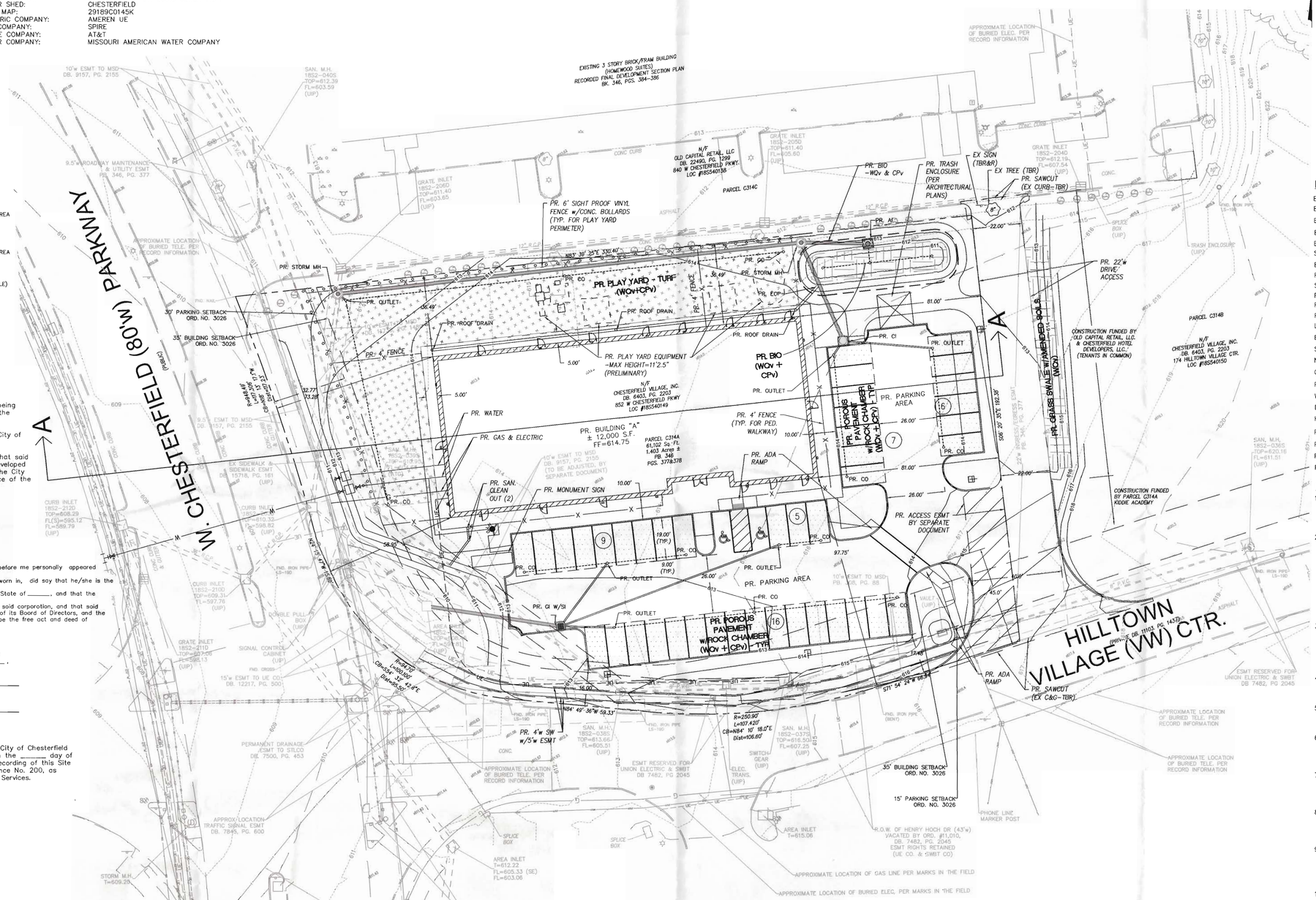
This is to certify that Stock and Associates Consulting Engineers, Inc. has prepared this Site Development Section Plan from a field survey and does not represent a property boundary survey. The information shown is a correct representation of all existing and proposed land divisions.

STOCK AND ASSOCIATES CONSULTING ENGINEERS INC.
L.S. No. 222-D

_____
WALTER J PFLEGER, MISSOURI P.L.S. NO. 2008000728

PREPARED FOR:
KELLER VENTURES, LLC
23 BOPP LANE
ST. LOUIS, MO 63131
PHONE: (636) 537-9700

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY WITH COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.



ST. LOUIS COUNTY BENCHMARK

BENCHMARK@2165 NGVD29 Elev = 646.98

"Standard Aluminum Disk" stamped SL-31, 1990. Disk is set along the west side of Eldridge-Payne Drive; across from the north drive extended for Innovations Inc. Approximately 180' south of the intersection of Hwy I-64 South Outer Road and Eldridge-Payne Drive.

GEOTECHNICAL ENGINEER'S STATEMENT

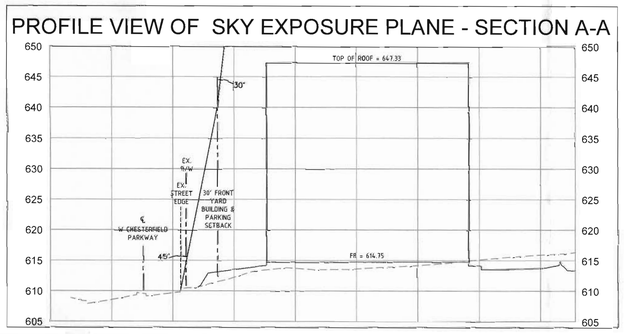
Neither SCI Engineering, Inc (SCI) nor the undersigned has prepared any part of these plans. The signature and seal are intended to confirm our review and professional opinion that these plans and revisions, through the date given below, comply with the Geotechnical Report dated December 2018 for the project, and are compatible with the soil and geologic conditions at the site, as anticipated from the exploration data.

Conditions may vary from those encountered during the exploration or can change due to construction activities, weather, or other conditions. Therefore, SCI must be involved during the construction of this project to observe the actual subsurface conditions and implementation of our recommendations relative to construction. Construction means and methods shall be left to the Contractor.

SCI ENGINEERING, INC

Timothy S. Barrett, P.E. CFM — Date

PROFILE VIEW OF SKY EXPOSURE PLANE - SECTION A-A



ABBREVIATIONS

ATG – ADJUST TO GRADE
B.C. – BACK OF CURB
C.O. – CLEANOUT
DB. – DEED BOOK
E – ELECTRIC
ELEV. – ELEVATION
EX. – EXISTING
F.C. – FACE OF CURB
FL – FLOWLINE
FT. – FEET
FND. – FOUND
G – GAS
H.W. – HIGH WATER
LFB – LOW FLOW BLOCKED
M.H. – MANHOLE
N/F – NOW OR FORMERLY
PB. – PLAT BOOK
PG. – PAGE
PR. – PROPOSED
P.V.C. – POLYVINYL CHLORIDE PIPE
R.C.P. – REINFORCED CONCRETE PIPE
R/W – RIGHT-OF-WAY
SQ. – SQUARE
T – TELEPHONE CABLE
T.B.A. – TO BE ABANDONED
T.B.R. – TO BE REMOVED
T.B.R.&R. – TO BE REMOVED AND REPLACED
TYP. – TYPICALLY
U.I.P. – USE IN PLACE
U.O.N. – UNLESS OTHERWISE NOTED
V.C.P. – VITRIFIED CLAY PIPE
W – WATER
(86'W) – RIGHT-OF-WAY WIDTH

LEGEND

EXISTING SANITARY SEWER
EXISTING STORM SEWER
EXISTING TREE
EXISTING BUILDING
EXISTING CONTOUR
SPOT ELEVATION
EXISTING UTILITIES
FOUND 1/2" IRON PIPE
SET IRON PIPE
FOUND CROSS
FOUND STONE
FIRE HYDRANT
LIGHT STANDARD
BUSH
SIGN
NOTES PARKING SPACES
GUY WIRE
POWER POLE
WATER VALVE
DENOTES RECORD INFORMATION
HANDICAPPED PARKING
PROPOSED CONTOUR 442
PROPOSED SPOT 442.25
PROPOSED STORM
PROPOSED SANITARY SS

NOTES

1. BOUNDARY AND TOPOGRAPHICAL SURVEY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. (BASIS OF BEARINGS: MISSOURI STATE PLANE, GRID NORTH)
2. ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. SHOULD ANY CONFLICTS BE EVIDENT, THE CONTRACTOR SHALL NOTIFY THE OFFICE OF THE ENGINEER IMMEDIATELY.
3. ON-SITE STORM WATER DRAINAGE REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CHESTERFIELD VALLEY MASTER STORM WATER DRAINAGE PLAN AND AS DIRECTED BY THE CITY OF CHESTERFIELD AND MSD.
4. ALL PROPOSED UTILITIES SHALL BE CONSTRUCTED TO THE CITY OF CHESTERFIELD STANDARDS.
5. ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH THE CITY OF CHESTERFIELD AND MSD STANDARDS.
6. STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
7. THIS SITE DEVELOPMENT SECTION PLAN WILL ADHERE TO THE PARKING AND LOADING REGULATIONS OF THE CITY OF CHESTERFIELD CODE.
8. NO PARKING SHALL BE PERMITTED ON ANY ROADWAY IN OR ADJACENT TO THE DEVELOPMENT AS REQUIRED BY THE SITE SPECIFIC ORDINANCE.
9. ALL UTILITIES WILL BE INSTALLED UNDERGROUND. THE DEVELOPMENT OF THIS PARCEL WILL COORDINATE THE installation OF ALL UTILITIES IN CONJUNCTION WITH THE CONSTRUCTION OF ANY ROADWAY.
10. PLANS SUBJECT TO CHANGE PENDING AGENCY REVIEWS AND FINAL ENGINEERING.

ST. LOUIS COUNTY NOTES

1. PRIOR TO IMPROVEMENT/CONSTRUCTION PLAN APPROVAL, THE ENGINEER SHALL PROVIDE A SIGNED AND SEALED NOTE ON THE PLANS FOR BOTH RESIDENTIAL AND COMMERCIAL PROJECTS STATING THAT THE UNIMPROVED EXISTING SIDEWALK ALONG THE PROJECT FRONTAGE MEETS CURRENT ST. LOUIS COUNTY/ADA STANDARDS.
2. PRIOR TO SPECIAL USE PERMIT ISSUANCE BY ST. LOUIS COUNTY, A SPECIAL CASH ESCROW SUPPORTED BY AN IRREVOCABLE LETTER OF CREDIT SHALL BE ESTABLISHED WITH ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION TO GUARANTEE COMPLETION OF REQUIRED ROAD IMPROVEMENTS. ROAD IMPROVEMENTS SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF OCCUPANCY PERMIT.
3. ANY ENTITY THAT PERFORMS WORK ON ST. LOUIS COUNTY MAINTAINED PROPERTY SHALL PROVIED THE COUNTY WITH A CERTIFICATE OF INSURANCE EVIDENCING GENERAL LIABILITY COVERAGE (BODILY INJURY AND PROPERTY DAMAGE) IN THE AMOUNTS SPECIFIED AS THE LIMITS OF LIABILITY SET BY THE STATE FOR PUBLIC ENTITIES. SUCH CERTIFICATION SHALL INCLUDE "ST. LOUIS COUNTY" AS AN ADDITIONAL INSURED AND SHALL BE PROVIDED PRIOR TO THE ISSUANCE OF ANY PERMIT. CERTIFICATE SHALL PROVIDE FOR A 30 DAY POLICY CANCELLATION NOTICE TO ST. LOUIS COUNTY. UPON REQUEST, THE COUNTY WILL PROVIDE THE SPECIFIC AMOUNTS FOR BOTH PER PERSON AND PER OCCURRENCE LIMITS.

PREPARED BY:
STOCK & ASSOCIATES Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63005
PH: (636) 530-9100
FAX: (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE DEVELOPMENT PLAN
CHESTERFIELD VILLAGE, NORTHWEST QUADRANT, PARCEL C314A
WEST CHESTERFIELD PARKWAY
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

DATE:

STATE OF MISSOURI
GEORGE MICHAEL STOCK
NUMBER PE-25116
PROFESSIONAL ENGINEER
12/20/18

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY NUMBER: 000996

REVISIONS:

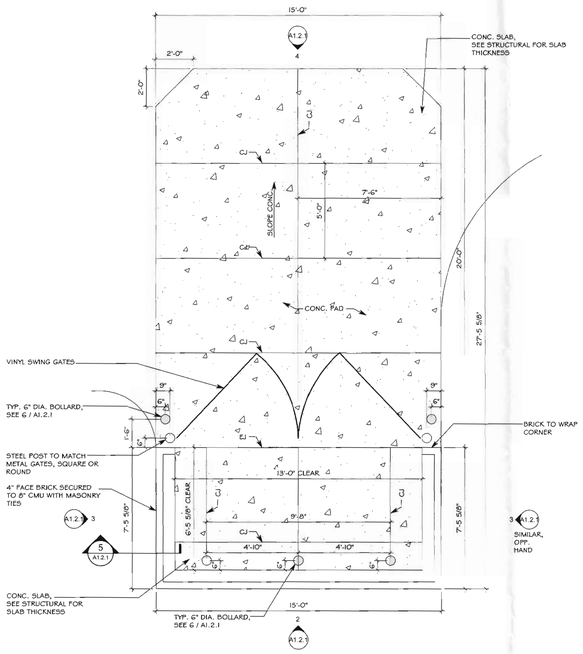
1	12-20-18 CITY COMMENTS

DRAWN BY: A.L.W.	CHECKED BY: G.M.S.
DATE: 11/13/2018	JOB NO.: 218-6322
M.S.D. P# 19MSD-00572	BASE MAP # 18S2
S.L.C. PLAT # 4478	PLAT SUP. # –
M.O.M.X. # MO-00	

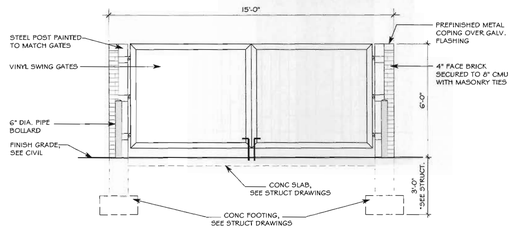
SHEET TITLE: SITE DEVELOPMENT SECTION PLAN

SHEET NO.: SDSP-1.0

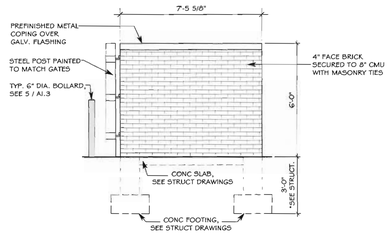
Drawing File: G:\Projects\2018\6322\Civil\SDSP 6322 - SDSP Production Base.dwg LAYOUT: SDSP - 1.0 Plan PLOTTED: Dec 20, 2018 - 8:52am PLOTTED BY: ashley.weber



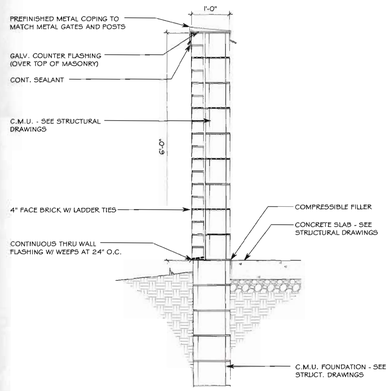
1 A1.2.1 ENLG PLAN - TRASH ENCLOSURE
SCALE: 3/8" = 1'-0"



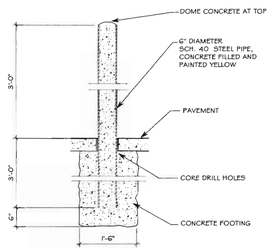
4 A1.2.1 ELEVATION - FRONT GATES OF TRASH ENCLOSURE
SCALE: 3/8" = 1'-0"



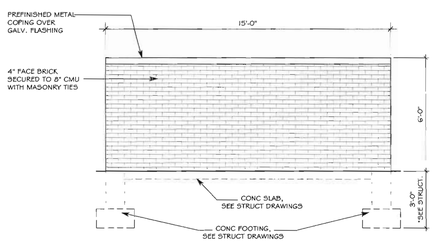
3 A1.2.1 ELEVATION - SIDE WALL OF TRASH ENCLOSURE
SCALE: 3/8" = 1'-0"



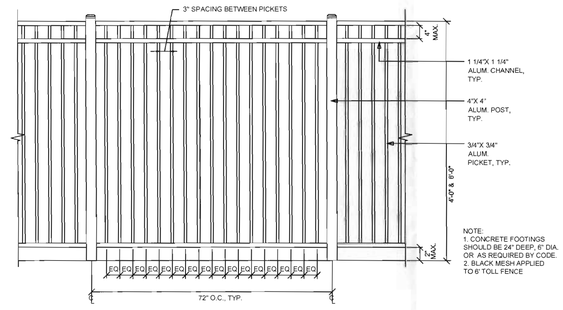
5 A1.2.1 TYP. TRASH ENCLOSURE WALL SECTION
SCALE: 3/4" = 1'-0"



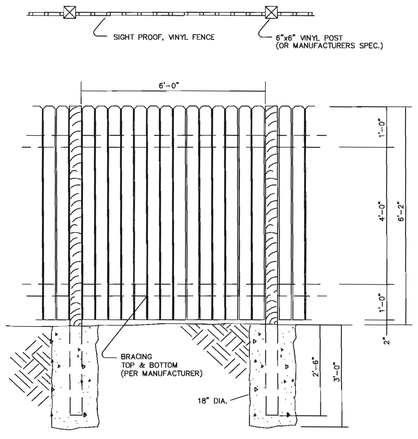
6 A1.2.1 TYP. BOLLARD DETAIL
SCALE: 3/4" = 1'-0"



2 A1.2.1 ELEVATION - BACK WALL OF TRASH ENCLOSURE
SCALE: 3/8" = 1'-0"



FENCE (BLACK ALUMINUM OR IRON) DETAIL



SIGHTPROOF FENCE (VINYL) DETAIL

PREPARED FOR:
KELLER VENTURES, LLC
23 BOPP LANE
ST. LOUIS, MO 63131
PHONE: (636) 537-9700

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY WITH COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

DRAWING FILE: Q:\Work\2005\2058320\Civil\SDSP\A1202 - SDSP Production Base.dwg LAYOUT: SDSP - 1.1 Details PLOTTED: Dec 20, 2018 - 8:32am PLOTTED BY: ashleywalker

PREPARED BY:
STOCK & ASSOCIATES Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO. 63005
PH. (636) 530-9100
FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE DEVELOPMENT PLAN
CHESTERFIELD VILLAGE, NORTHWEST QUADRANT, PARCEL C314A
WEST CHESTERFIELD PARKWAY
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

DATE:

STATE OF MISSOURI
GEORGE MICHAEL STOCK
NUMBER PE-2511A
PROFESSIONAL ENGINEER
12/20/18

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

1	12-20-18	CITY COMMENTS

DRAWN BY: A.L.W.	CHECKED BY: G.M.S.
DATE: 11/13/2018	JOB NO.: 218-6322
M.S.D. P.B. 186MSD-00572	BASE MAP #: 18S2
S.L.C. MAT #: 4478	MAT SUP. #: -
M.D.N.R. #: MO-00	

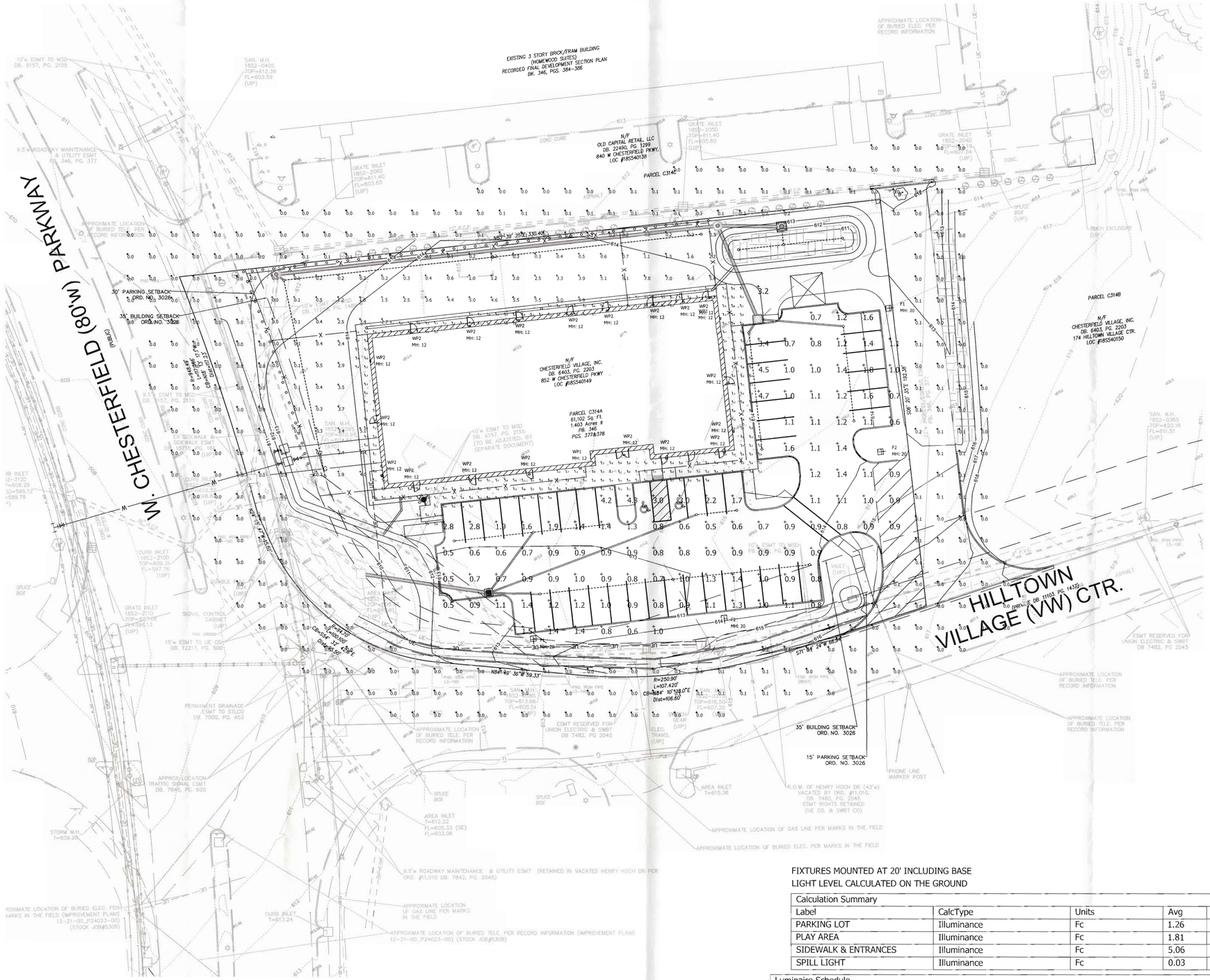
SHEET TITLE:
SDSP DETAILS

SHEET NO.:
SDSP-1.1

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



FIXTURES MOUNTED AT 20' INCLUDING BASE
LIGHT LEVEL CALCULATED ON THE GROUND

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING LOT	Illuminance	Fc	1.26	4.7	0.5	2.52	9.40
PLAY AREA	Illuminance	Fc	1.81	7.0	0.0	N.A.	N.A.
SIDEWALK & ENTRANCES	Illuminance	Fc	5.06	9.4	2.0	2.53	4.70
SPILL LIGHT	Illuminance	Fc	0.03	0.2	0.0	N.A.	N.A.

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Description
	2	F1	SINGLE	44	88	1.000	GLEON-AF-01-LED-E1-SL4-800-HSS
	2	F2	SINGLE	44	88	1.000	GLEON-AF-01-LED-E1-T4W-800
	1	WP1	SINGLE	25.31	25.31	1.000	ISW-AF-450-LED-E1-SL4
	20	WP2	SINGLE	25.31	506.2	1.000	ISW-AF-450-LED-E1-SL3

DESIGN IS BASED ON CURRENT INFORMATION PROVIDED AT THE TIME OF REQUEST. ANY CHANGES IN MOUNTING HEIGHT OR LOCATION, LAMP WATTAGE, LAMP TYPE, AND EXISTING FIELD CONDITIONS, THAT EFFECT ANY OF THE PREVIOUSLY MENTIONED, WILL VOID CURRENT LAYOUT AND REQUIRE A CHANGE REQUEST AND RECALCULATION.

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY WITH COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

PREPARED FOR:
ARCO CONSTRUCTION COMPANY
900 ROCK HILL ROAD
ST. LOUIS, MO 63119
PHONE: (314) 963-0715

PREPARED BY:
STOCK & ASSOCIATES
Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO. 63005
PH. (636) 530-9100
FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE DEVELOPMENT PLAN
CHESTERFIELD VILLAGE, NORTHWEST QUADRANT,
PARCEL C314A
WEST CHESTERFIELD PARKWAY
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

DATE:

STATE OF MISSOURI
GEORGE MICHAEL STOCK
NUMBER PE-2011A
PROFESSIONAL ENGINEER
12/20/18

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

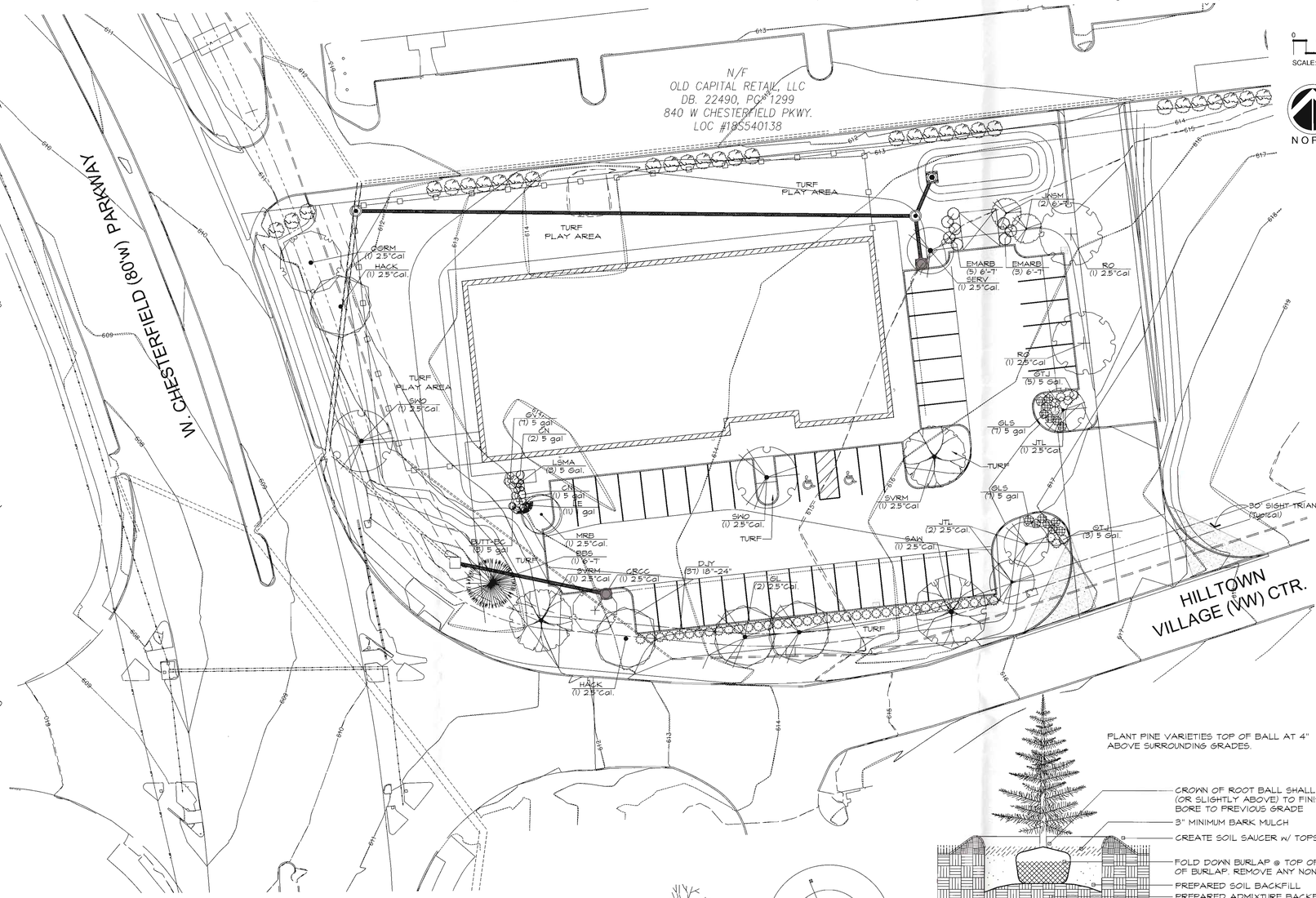
1	12-20-18 CITY COMMENTS	

DRAWN BY: A.L.W.	CHECKED BY: G.M.S.
DATE: 11/13/2018	JOB NO.: 218-6322
M.S.D. P# 18MSD-00572	SHEET MAP #: 18S2
S.L.C. MAT #: 4478	MAT SUP. #: –
M.O.N.R. #: MO-00	

SHEET TITLE:
PHOTOMETRIC PLAN

SHEET NO.:
SDSP-2.0

DRAWING FILE: G:\SHARED\2007\218322\CAD\SDSP\A322 - SDSP Production Base.dwg LAYOUT: SDSP - 02.0 Photometrics PLOTTED: Dec 20, 2018 - 8:03am PLOTTED BY: ashley.weber



LANDSCAPE GUIDELINE SPECS:

GENERAL:

1.) All natural vegetation shall be maintained where it does not interfere with construction or the permanent plan of operation. Every effort possible shall be made to protect existing structures or vegetation from damage due to equipment usage. Contractor shall at all times protect all materials and work against injury to public.
2.) The landscape contractor shall be responsible for any coordination and sequencing with other site related work being performed by other contractors. Refer to additional drawings for further coordination of work to be done.
3.) Underground facilities, structures and utilities must be considered approximate only. There may be others not presently known or shown. It shall be the landscape contractor's responsibility to determine or verify the existence of and exact location of the above (Call utility location services in municipality).
4.) Plant material are to be planted in the same relationship to grade as was grown in nursery conditions. All planting beds shall be cultivated to 6" depth minimum and graded smooth immediately before planting of plants. Plant groundcover to within 12" of trunk of trees or shrubs planted within the area.
5.) It shall be the landscape contractor's responsibility to:
A.) Verify all existing and proposed features shown on the drawings prior to commencement of work.
B.) Report all discrepancies found with regard to existing conditions or proposed design to the landscape architect immediately for a decision.
C.) Stake the locations of all proposed plant material and obtain the approval of the owner's representative or landscape architect ten (10) days prior to installation.
6.) Items shown on this drawing take precedence over the material list. It shall be the landscape contractor's responsibility to verify all quantities and conditions prior to implementation of this plan. No substitutions of types or size of plant materials will be accepted without written approval from the landscape architect.
7.) Provide single-stem trees unless otherwise noted in plant schedule.
8.) All plant material shall comply with the recommendations and requirements of ANSI Z60.1 "American Standards for Nursery Stock".
9.) It shall be the contractor's responsibility to provide for inspection of the plant material by the Landscape Architect (or Owners' Representative) prior to acceptance. Inspections may take place before, during or after installation. Plants not conforming exactly to the plant list will not be accepted and shall be replaced at the landscape contractor's expense.
10.) All bids are to have unit prices listed. The Owner has the option to delete any portion of the contract prior to signing the contract or beginning work. This will be a unit price contract; quotes shall be valid for 12 months.
11.) Should auger equipment be utilized in excavating any plant pits, vertical sides of plant pits shall be thoroughly scarified to avoid creation of "polished side walls" prior to plant material installation.
12.) All excess topsoil, rocks, debris and/or tainted soils shall be removed by the general contractor prior to point project is turned over to the landscape contractor to commence landscape installation.
13.) Keep all plant material (except turf) a minimum of 36" clear of fire hydrants.
14.) Landscape contractor shall kill & remove all existing weeds within the project site.
15.) All tags, nursery stakes, labels, etc. shall be removed by the landscape contractor at completion of all landscape installation.
16.) Landscape contractor shall be in compliance with all federal, state and local laws / regulations relating to insect infestation and/or plant diseases.
17.) All substitutions of plant material shall be submitted to landscape architect for approval.

PRUNING:

1.) Lightly prune trees at time of planting. Prune only the crossover limbs, intermingled leaders and/or any broken branches. Some interior twigs and lateral branches may be pruned. However, do not remove the terminal buds of branches that extend to the edge of the crown.
2.) All pruning shall comply with ANSI A300 standards.

INSURANCE:

1.) The landscape contractor shall submit certificates of insurance for workman's compensation and general liability.

MULCH:

1.) All mulch to be shredded oak bark mulch at 3" depth (after compaction) unless otherwise noted. Mulch shall be clean and free of all foreign materials, including weeds, mold, deleterious materials, etc.
2.) No plastic sheeting or filter fabric shall be placed beneath shredded bark mulch beds. Mirafi fabric shall be used beneath all gravel mulch beds. Lap fabric 6" over adjacent coverages.
3.) Edge all beds with spade-cut edge unless otherwise noted.

MAINTENANCE:

1.) Landscape Contractor shall provide a separate proposal to maintain all plants, shrubs, groundcover, perennials and annuals for a period of 12 months after acceptance.
2.) Contractor shall ensure that only competent and trained personnel shall provide such services and that such services be provided in a timely manner.
3.) Watering of seeded or sodded lawns shall begin immediately and shall continue to be provided continuously for the following 72 hours. Regardless, the landscape contractor shall be responsible for all landscape maintenance until project turnover.

SIGHT TRIANGLES:

1.) No landscape material or other obstructions shall be placed or be maintained within the sight distance area so as not to impede the vision between a height of thirty inches (30") and ten feet (10') above the adjacent street or paving surfaces.
2.) Sight triangles at the intersection of a public street and a private access way (except for single family residences) shall also be formed by measuring from the point of intersection of the street frontage curbs and the entrance curb lines a distance of 35' and connecting the points so established to form the sight triangle area.

TOPSOIL:

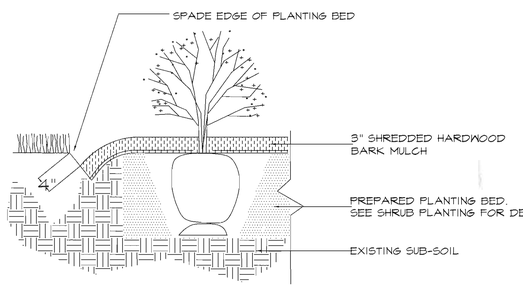
1.) Topsoil mix for all proposed landscape plantings shall be five (5) parts well-drained screened organic topsoil to one (1) part Canadian sphagnum peat moss as per planting details. Roto-till topsoil mix to a depth of 6" minimum and grade smooth.
2.) Provide a soil analysis, as requested, made by an independent soil-testing agency outlining the % of organic matter, inorganic matter, deleterious material, pH and mineral content.
3.) Any foreign topsoil used shall be free of roots, stumps, weeds, brush, stones (larger than 1"), litter or any other extraneous or toxic material. Landscape contractor shall be fully responsible for correcting all negative soil issues prior to plant installation. Killing and removal of all weeds shall be the responsibility of the landscape contractor as part of this task.
4.) Landscape contractor to apply pre-emergent herbicide to all planting beds upon completion of planting operations and before application of shredded bark mulch.

TURF:

1.) All disturbed lawn areas to be seeded with a mixture of Turf-Type fescue (300# per acre) and bluegrass (18# per acre). Lawn areas shall be unconditionally warranted for a period of 90 days from date of final acceptance. Bare areas more than one square foot per any 30 square feet shall be replaced.
2.) Seed and fertilization operations shall occur between May 1 and June 15th or between September 1 and October 15th unless directed by others in writing AND irrigation system is operating.
3.) Granular or pelleted fertilizer consisting of 50% water-insoluble slow release nitrogen, phosphorous and potassium in a 12-12-12 composition.
4.) The turf contractor shall be responsible for protection of finished grade, restore and repair any erosion or water damage and obtain owners' approval prior to seeding or sod installation.
5.) Landscape contractor shall offer an alternate price for sod in lieu of seed. Sod shall be cut at a uniform thickness of 3/4". No broken places, irregular pieces or torn pieces will be accepted.
6.) Any points carrying concentrated water loads and all slopes of 15% or greater shall be sodded.
7.) All sod shall be placed a maximum of 24 hours after harvesting.
8.) Recondition existing lawn areas damaged by Contractor's operations including equipment/material storage and movement of vehicles.
9.) Sod Contractor to ensure sod is placed below sidewalk and all paved area elevations to allow for proper drainage.

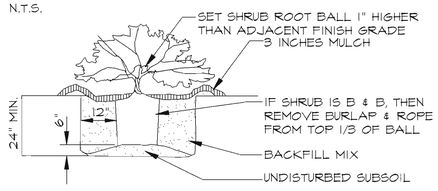
WARRANTY:

1.) All plant material (excluding ground cover, perennials and annuals) are to be warranted for a period of 12 months after complete installation of all landscape material at 100% of the installed price.
2.) Any plant material found to be defective shall be removed and replaced within 30 days of notification or in growth season determined to be best for that plant.
3.) Only one replacement per tree or shrub shall be required at the end of the warranty period, unless loss is due to failure to comply with the warranty.
4.) Lawn establishment period will be in effect once the lawn has been mowed three times. Plant establishment period shall commence on the date of acceptance and 100% completion.
5.) A written guarantee shall be provided to the owner per conditions outlined in #1 above.



SPADE-CUT EDGE DETAIL

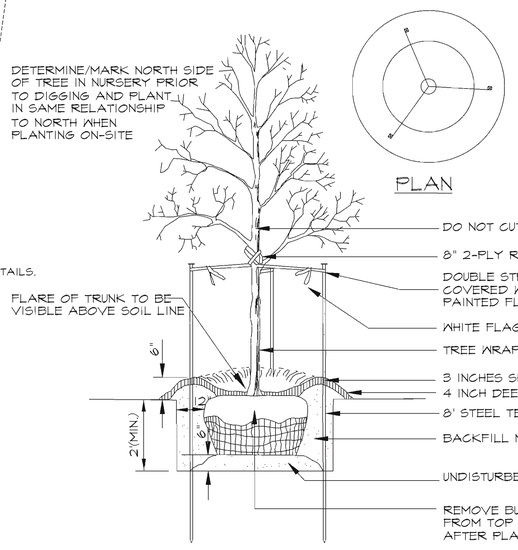
N.T.S.



PRUNE ANY BROKEN BRANCHES AFTER PLANTING. DAMAGED SHRUBS OR BROKEN / CRUMBLING ROOT BALLS WILL BE REJECTED.

SHRUB PLANTING

N.T.S.

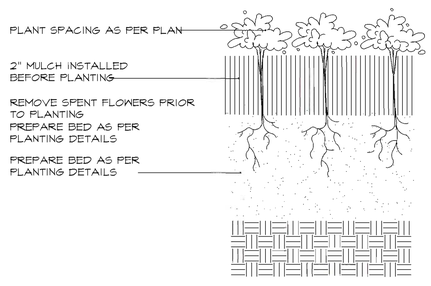


DECIDUOUS TREE PLANTING

N.T.S.

EVERGREEN TREE PLANTING

N.T.S.



PERENNIAL / ANNUAL PLANTING

N.T.S.

REVISIONS | BY

Landscape TECHNOLOGIES
67 Jacobs Creek Drive
St. Charles, Missouri 63304
MO Landscape Architectural Corporation #2005005752
(636) 928-1250
Fax: (636) 928-4563

RANDALL W. MARDIS NUMBER 019 REGISTERED LANDSCAPE ARCHITECT

RANDALL W. MARDIS
MISSOURI LANDSCAPE ARCHITECT #000019
DATE: 11-13-18

PLANTING PLAN FOR THE PROPOSED
Kiddie Academy
CHESTERFIELD VILLAGE, N.W. QUADRANT-PARCEL C314
CHESTERFIELD, MISSOURI

DRAWN	R. MARDIS
CHECKED	RWM/EL
DATE	11-13-18
SCALE	1"=20'-0"
JOB No.	2018-163
SHEET	L-1

OF TWO SHEETS

LANDSCAPE REQUIREMENTS:

STREET TREES: 1 per 50 LF FRONTAGE

- 117.31 LF @ W. CHESTERFIELD PKWY., REQUIRING THREE (3) TREES
- 274.46 LF @ HILLTOWN VILLAGE CENTER, REQUIRING FIVE (5) TREES

NOTE: NO PARKING SPACE SHALL BE FURTHER THAN FIFTY (50) FEET FROM A TREE.

TREE GROUPINGS:
A MINIMUM OF 20% OF TREES SHALL COME FROM THREE CATEGORIES: DECIDUOUS / ORNAMENTAL / EVERGREEN

TYPE	QTY.	PERCENTAGE
DECIDUOUS:	13	43%
ORNAMENTAL:	6	20%
EVERGREEN:	11	37%

6 FAST GROWTH (20%) AND 24 SLOW/MEDIUM GROWTH (80%)

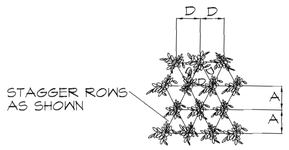
ALL STREET TREES SHALL BE MIN. 2.5" CALIPER WITH A MAXIMUM OF 20% OF TREES OF ONE SPECIES THROUGHOUT

OPEN SPACE
TOTAL SITE: 61,102 SF
BUILDING AREA: 12,000 SF
PARKING / DRIVE AREAS: 20,003 SF
REMAINING OPEN SPACE: 29,099 SF

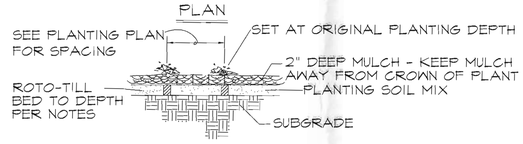
OPEN SPACE = 29,099 SF TOTAL or 47.6% OF SITE --- 30% MINIMUM REQUIRED

NOTE:

- ALL NATIVE GRASS PLUGS ARE TO BE A MINIMUM 4.5" DEEP X 2" DIAMETER
- CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER AND MSD. CONTACT MSD AT 314/335-2072.
- DURING CONSTRUCTION, THE BIO-RETENTION AREAS MAY TRAP SEDIMENT. FINAL CONSTRUCTION AND PLANTING OF THE BIO-RETENTION AREAS SHALL BE COMPLETED AFTER SILT AND DEBRIS IS REMOVED.
- HEAVY EQUIPMENT SHALL BE KEPT OFF OF THE SOIL MIX DURING CONSTRUCTION OPERATIONS TO AVOID COMPACTING. FOOT TRAFFIC AND PRE-SOAKING TO AID NATURAL COMPACTION IS ALLOWABLE.
- SOIL pH SHALL FALL IN THE RANGE OF 5.5 AND 7.
- SEE CIVIL DRAWINGS FOR CROSS-SECTIONAL DETAILS OF MULCH AND SOIL MAKEUP.



SPACING "D"	ROW "A"	# OF PLANTS PER SQ. FT.
30"	26"	0.16
24"	20.8"	0.25
18"	15.6"	0.45
15"	13"	0.64
12"	10.4"	1.00
10"	8.66"	1.44
8"	6.93"	2.25

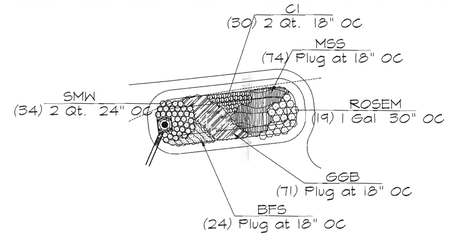


FORB/GRASS PLANTING DETAIL

N.T.S.

BIO-RETENTION MAINTENANCE PROCEDURES:

1. ADD 2-4 INCHES OF MULCH (SEE CIVIL DWGS. FOR TYPE) TO THE ENTIRE NEWLY PLANTED RAIN GARDEN/BIO-RETENTION AREA. DO NOT COVER THE CROWNS OF THE PERENNIALS. REPLENISH THE MULCH AS NEEDED.
2. AVOID FINE CUT OR LIGHTER WEIGHT MULCHES AS THEY FLOAT IN WET CONDITIONS.
3. PRUNE ANY DEAD, DISEASED OR DAMAGED PLANTS AS SOON AS THE PROBLEM IS NOTICED. DEADHEAD PLANTS AS NEEDED AND DIVIDE PERENNIALS EVERY 3-4 YEARS AS NEEDED. LEAVE STEMS AND SEED HEADS STANDING IN FALL/WINTER TO ADD VISUAL INTEREST AND TO PROVIDE FOOD AND COVER FOR BIRDS.
4. PRUNE THE FOLIAGE OF PERENNIALS WHEN THEY DIE BACK FOR THE WINTER AND ORNAMENTAL GRASSES BEFORE NEW GROWTH BEGINS IN THE SPRING.
5. HAND WEED BIWEEKLY UNTIL PLANTS ARE ESTABLISHED, THEREAFTER, REMOVE OR SPOT WEEDS AS NECESSARY
6. WATER THE GARDEN DURING ITS ESTABLISHMENT AND EXTENDED DRY PERIODS. ONE INCH OF WATER PER WEEK IS RECOMMENDED.
7. DO NOT USE LAWN FERTILIZERS NEAR GARDEN AREA AS THIS WILL STIMULATE WEED GROWTH.
8. EACH SPRING, MOW AND REMOVE DEAD VEGETATION. USE BURNING ONLY UNDER SUPERVISION OF LOCAL FIRE DEPARTMENT (NATIVE PLANTS THRIVE UNDER FIRE MANAGEMENT).



BIO-RETENTION LANDSCAPE

N.T.S.

PLANT SCHEDULE

TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE	Slow	Moderate	Fast	< 6"	6 - 18"	18 - 36"	> 3'	< 18"	3 - 6'	6 - 10'	10 - 15'	> 15'	< 15'	15 - 25'	25 - 40'	40 - 65'	> 65'
HACK	2	Common Hackberry / Celtis occidentalis	2.5"Cal.		X														X	
GL	2	Greenspire Littleleaf Linden / Tilia cordata 'Greenspire'	2.5"Cal.		X														X	
RO	2	Red Oak / Quercus rubra	2.5"Cal			X													X	
SAN	1	Sawtooth Oak / Quercus acutissima	2.5"Cal.		X														X	
SVRM	1	Sun Valley Red Maple / Acer rubrum 'Sun Valley'	2.5"Cal			X													X	
OGRM	1	'October Glory' Maple / Acer rubrum 'October Glory'	2.5"Cal			X													X	

EVERGREEN TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE	Slow	Moderate	Fast	< 6"	6 - 18"	18 - 36"	> 3'	< 18"	3 - 6'	6 - 10'	10 - 15'	> 15'	< 15'	15 - 25'	25 - 40'	40 - 65'	> 65'
BBS	3	Bakeri Blue Spruce / Picea pungens 'Bakerii'	6'-7'		X													X		
EMARB	8	Emerald Arborvitae / Thuja occidentalis 'Emerald'	6'-7'		X											X				
JWSM	2	Sweetbay Magnolia / Magnolia virginiana 'Jim Wilson'	6'-7'		X												X			

FLOWERING TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE	Slow	Moderate	Fast	< 6"	6 - 18"	18 - 36"	> 3'	< 18"	3 - 6'	6 - 10'	10 - 15'	> 15'	< 15'	15 - 25'	25 - 40'	40 - 65'	> 65'
CRCC	1	Canada Red Chokecherry / Prunus virginiana 'Canada Red'	2.5"Cal		X													X		
JTL	3	Ivory Silk Japanese Tree Lilac / Syringa reticulata 'Ivory Silk'	2.5"Cal.		X													X		
MRB	1	Merlot Redbud / Cercis x 'Merlot'	2.5"Cal.			X												X		
SERV	1	'Autumn Brilliance' Serviceberry / Amelanchier X grandiflora 'Autumn Brilliance'	2.5"Cal.		X													X		

SHRUBS	QTY	COMMON NAME / BOTANICAL NAME	SIZE	Slow	Moderate	Fast	< 6"	6 - 18"	18 - 36"	> 3'	< 18"	3 - 6'	6 - 10'	10 - 15'	> 15'	< 15'	15 - 25'	25 - 40'	40 - 65'	> 65'
BUTT-BC	3	Blue Chip Butterfly Bush / Buddleja davidii 'Blue Chip'	5 gal			X						X	X							
CN	3	Coppertina Ninebark / Physocarpus opulifolius 'Coppertina'	5 gal		X							X								
DJY	37	Dense Japanese Yew / Taxus cuspidata 'Densiformis'	18"-24"	X	X							X								
GTJ	8	Gold Tip Juniper / Juniperus chinensis 'Gold Tip'	5 Gal.	X	X							X							X	
GVB	7	Green Velvet Boxwood / Buxus 'Green Velvet'	5 gal									X								
GLS	14	Gro-Low Fragrant Sumac / Rhus aromatica 'Gro-Low'	5 gal						X											
LSMA	9	Low Scape Mound Chokeberry / Aronia melanocarpa 'Low Scape Mound'	5 Gal.					X												

ANNUALS/PERENNIALS	QTY	COMMON NAME / BOTANICAL NAME	SIZE	Slow	Moderate	Fast	< 6"	6 - 18"	18 - 36"	> 3'	< 18"	3 - 6'	6 - 10'	10 - 15'	> 15'	< 15'	15 - 25'	25 - 40'	40 - 65'	> 65'
LE	11	Lamb's Ears / Stachys byzantina 'Silver Carpet'	1 gal		X		X													

PLEASE NOTE:

- ALL PLANTING BEDS TO BE EDGED W/ SPADE-CUT EDGE UNLESS OTHERWISE NOTED.
- ADJUST TREE LOCATIONS FOR LIGHT STANDARDS AND UNDERGROUND UTILITIES.
- NO TREES OR OTHER OBSTRUCTIONS SHALL BE LOCATED WITHIN 6 FEET OF FIRE HYDRANTS.
- ALL SHRUBS/PERENNIALS WITHIN SIGHT TRIANGLE ZONES TO BE MAINTAINED AT A MAXIMUM HEIGHT OF TWENTY FOUR INCHES (2 FEET); ALL TREES TO BE MAINTAINED WITH A CLEAR HEIGHT FROM GRADE OF TEN (10) FEET.

PLANTING, WATER and MULCH REQUIREMENTS

WATER AVAILABILITY	REQUIRED PLANTING PERIOD	MINIMUM CONTAINER SIZE	WATER REQUIREMENT FIRST 3 WEEKS	WATER REQUIREMENT AFTER 3 WEEKS	MAXIMUM MULCH DEPTH
NO AVAILABILITY TO WATER AFTER	LATE FEB. - APRIL ONLY	2.25"x3.75" OR LARGER	WATER EACH PLUG IMMEDIATELY		1.5" FOR PLUGS
MANUAL WATERING WITH STANDARD SPRINKLER	LATE FEB. - EARLY JUNE or SEPT. - OCTOBER	4.5"x5 OR" LARGER IN SUMMER & FALL	1" (60 MIN.) EVERY 4 DAYS	1" (60 MIN.) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED	1.5" FOR PLUGS 2.5" FOR QUARTS
AUTOMATIC IRRIGATION (WATER MORE FREQUENTLY THAN NORMAL DURING FIRST TWO MONTHS AFTER PLANTING)	LATE FEB. - EARLY OCTOBER	2.25"x3.75" OR LARGER IN SPRING	1" (60 MIN.) EVERY 4 DAYS IN SPRING AND FALL	1" (60 MIN.) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED	1.5" FOR PLUGS 2.5" FOR QUARTS
		4.5"x5 OR" LARGER IN SUMMER & FALL	1" (60 MIN.) EVERY 3 DAYS IN SUMMER		

REVISIONS BY

Landscape TECHNOLOGIES
67 Jacobs Creek Drive
St. Charles, Missouri 63304
(636) 928-1250
Fax: (636) 928-4563
MO Landscape Architectural Corporation #2005009792

RANDALL W. MARDIS
MISSOURI LANDSCAPE ARCHITECT #002001
DATE: 11-13-18

PLANTING PLAN FOR THE PROPOSED
Kiddie Academy
CHESTERFIELD VILLAGE, N.W. QUADRANT-PARCEL C314
CHESTERFIELD, MISSOURI

DRAWN	R. MARDIS
CHECKED	RWM/EL
DATE	11-13-18
SCALE	N.A.
JOB No.	2018-163
SHEET	L-2
	OF TWO SHEETS

McGraw-Edison

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #	GLEON-AF-01-LED-SL4-800-HSS	Type
Project		F1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermelly isolated from Light Squares for optimal thermal performance. Heevy-wall, die-cast aluminum end ceps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical
LED drivers are mounted to removable tray assambly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standerd with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED lumineire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

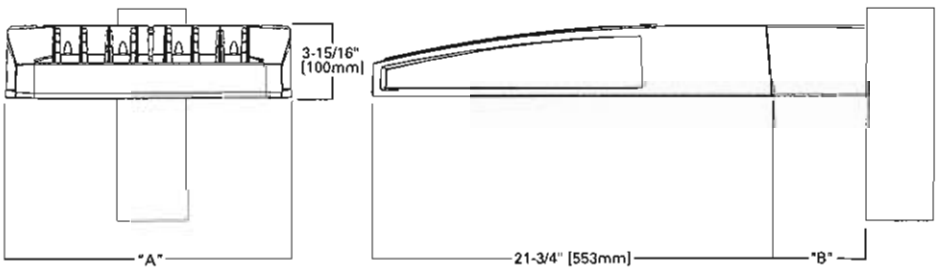
GLEON
GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

LumenSafe Technology CLICK HERE

DIMENSIONS



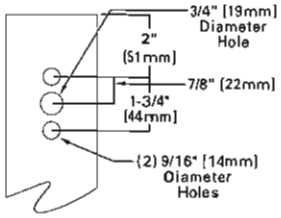
DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length [1]	Weight with Arm (lbs.)	EPA with Arm [2] (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN

TYPE "N"



CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

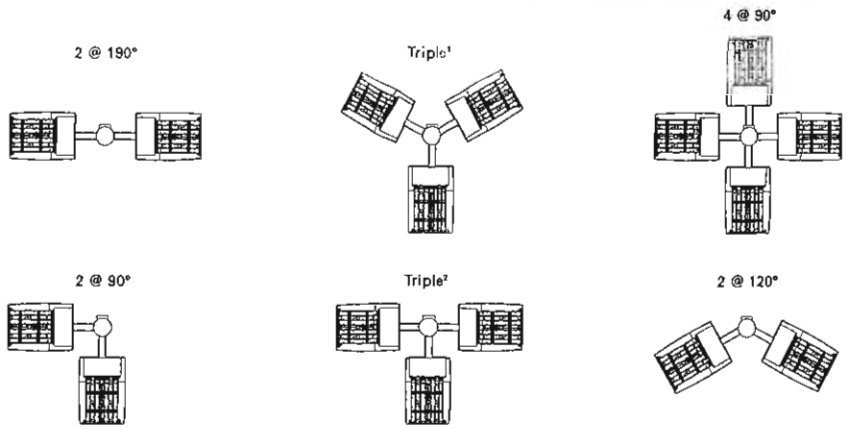
ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

*www.designlights.org

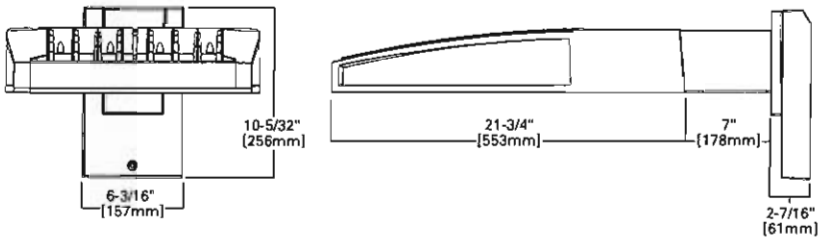
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

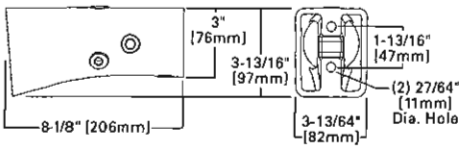


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

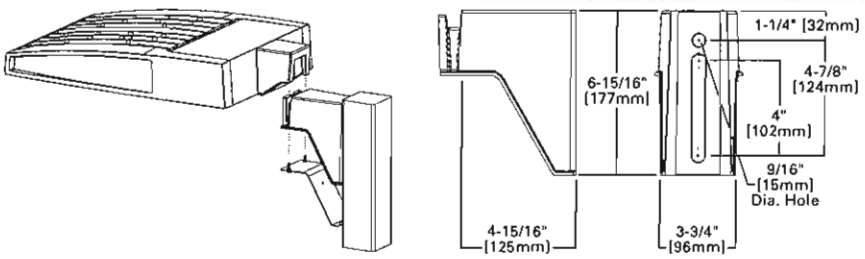
STANDARD WALL MOUNT

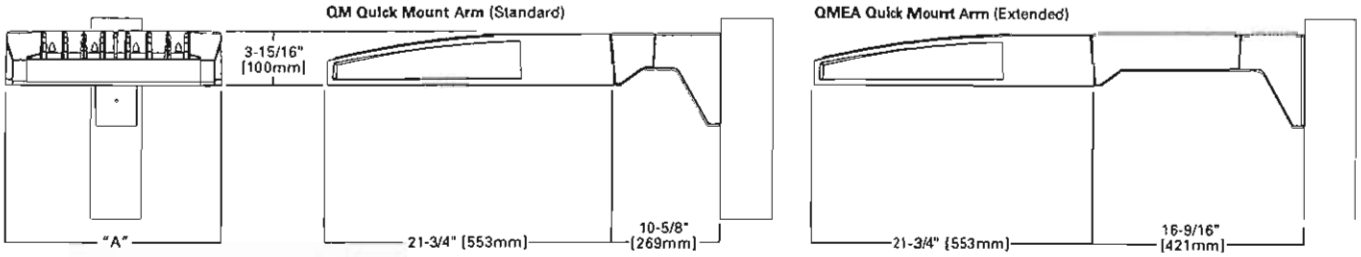


MAST ARM MOUNT



QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



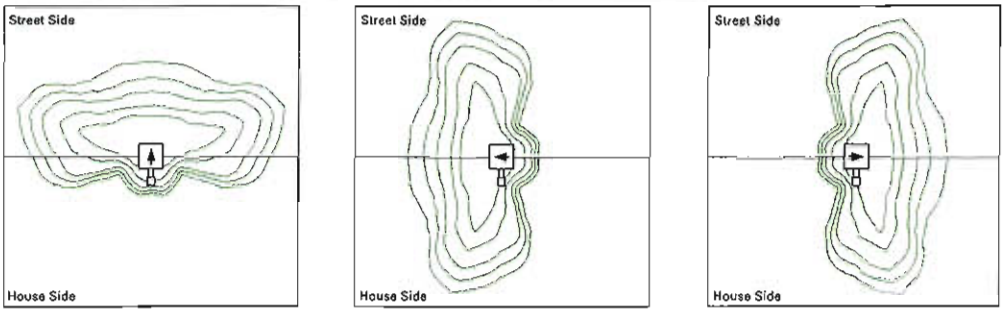


QUICK MOUNT ARM DATA

Number of Light Squares [1,2]	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	16-1/2" (394mm)	35 (15.91 kgs.)	39 (17.27 kgs.)	1.11
5-6 [3]	21-5/9" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/9" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

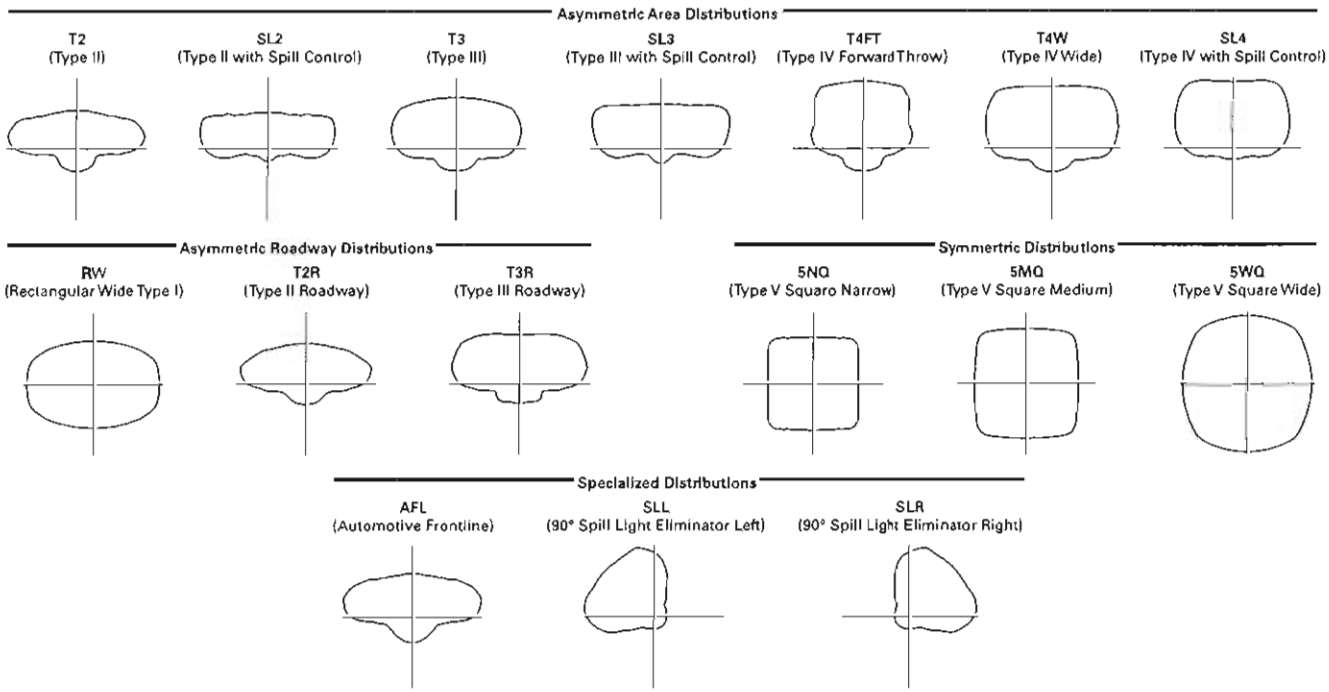
NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

OPTIC ORIENTATION



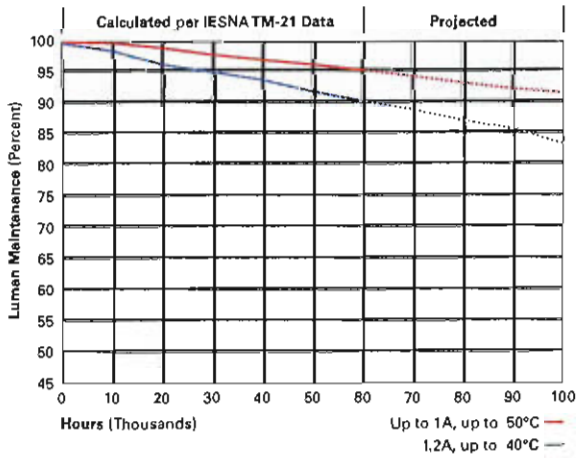
Standard | **Optics Rotated Left @ 90° [L90]** | **Optics Rotated Right @ 90° [R90]**

OPTICAL DISTRIBUTIONS



LUMEN MAINTENANCE

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	416,000
1.2A	Up to 40°C	> 90%	205,000



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

NOMINAL POWER LUMENS (1.2A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		67	129	191	258	320	382	448	511	575	640
Input Current @ 120V (A)		0.58	1.16	1.78	2.31	2.94	3.56	4.09	4.71	5.34	5.87
Input Current @ 208V (A)		0.33	0.53	0.93	1.27	1.57	1.87	2.22	2.52	2.8	3.14
Input Current @ 240V (A)		0.29	0.55	0.80	1.10	1.35	1.61	1.93	2.18	2.41	2.71
Input Current @ 277V (A)		0.25	0.48	0.70	0.96	1.18	1.39	1.59	1.90	2.09	2.36
Input Current @ 347V (A)		0.20	0.39	0.57	0.78	0.96	1.15	1.36	1.54	1.72	1.92
Input Current @ 480V (A)		0.15	0.30	0.43	0.60	0.73	0.85	1.03	1.16	1.28	1.45
Optics											
T2	4000K/5000K Lumens	6,709	13,111	19,562	25,848	32,025	38,325	45,324	51,355	57,286	63,424
	3000K Lumens	5,939	11,606	17,316	22,881	28,349	33,925	40,121	45,459	50,710	56,143
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	7,122	13,919	20,769	27,442	34,000	40,687	48,117	54,519	60,816	67,333
	3000K Lumens	5,939	11,606	17,316	22,881	28,349	33,925	40,121	45,459	50,710	56,143
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,838	13,363	19,939	26,346	32,642	39,062	46,196	52,343	58,388	64,646
	3000K Lumens	6,053	11,829	17,850	23,321	28,895	34,578	40,893	46,334	51,685	57,226
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,990	13,650	20,382	26,931	33,368	39,930	47,223	53,606	59,686	66,081
	3000K Lumens	6,188	12,092	18,042	23,839	29,537	35,346	41,802	47,364	52,834	58,495
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	5,878	13,440	20,055	26,499	32,832	38,289	46,464	62,646	58,726	65,020
	3000K Lumens	8,088	11,887	17,753	23,457	28,063	34,779	41,130	46,602	51,984	57,556
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G6	B3-U0-G5	B3-U0-G6	B4-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,788	13,267	18,785	26,156	32,408	38,781	46,864	51,967	57,868	64,180
	3000K Lumens	6,010	11,744	17,523	23,153	28,688	34,329	40,599	46,001	51,313	56,812
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,697	13,088	19,529	25,804	31,970	38,259	45,245	51,267	57,186	83,315
	3000K Lumens	5,928	11,686	17,287	22,842	28,300	33,867	40,051	45,382	50,621	58,048
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,837	13,361	19,936	26,342	32,639	38,057	46,188	62,336	58,380	64,636
	3000K Lumens	6,052	11,827	17,647	23,318	28,892	34,573	40,887	46,328	51,878	57,216
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,495	12,695	18,943	25,029	31,011	37,110	43,886	49,727	55,470	61,414
	3000K Lumens	5,750	11,238	16,768	22,156	27,461	32,860	38,848	44,018	49,102	54,364
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G6	B3-U0-G5	B3-U0-G5	B3-U0-G6	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	7,052	13,781	20,664	27,171	33,664	40,285	47,641	63,981	60,215	66,669
	3000K Lumens	6,242	12,199	18,203	24,052	29,799	35,660	42,172	47,784	53,302	59,015
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	7,182	14,034	20,942	27,671	34,284	41,027	48,518	54,975	61,323	67,886
	3000K Lumens	6,358	12,423	18,538	24,484	30,348	36,317	42,948	48,664	54,283	60,102
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	7,201	14,073	20,998	27,744	34,375	41,136	48,648	65,121	61,487	68,077
	3000K Lumens	8,374	12,457	18,587	24,558	30,429	36,414	43,063	48,793	54,428	60,262
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	6,009	11,741	17,519	23,148	28,681	34,321	40,589	45,990	51,301	56,798
	3000K Lumens	5,319	10,393	15,508	20,491	25,388	30,381	35,929	40,710	45,412	50,278
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G6	B4-U0-G5
RW	4000K/5000K Lumens	6,989	13,657	20,378	28,925	33,360	39,921	47,211	53,494	69,672	66,066
	3000K Lumens	6,187	12,089	18,039	23,834	29,530	35,338	41,791	47,353	52,822	58,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	7,014	13,706	20,452	27,023	33,481	40,066	47,383	53,688	59,868	66,306
	3000K Lumens	6,209	12,133	18,104	23,921	29,637	35,466	41,843	47,525	53,013	68,694
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (1A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		59	113	166	225	279	333	391	445	501	558
Input Current @ 120V (A)		0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.6	5.07
Input Current @ 208V (A)		0.29	0.56	0.92	1.11	1.37	1.64	1.93	2.19	2.46	2.75
Input Current @ 240V (A)		0.26	0.48	0.71	0.96	1.19	1.41	1.67	1.89	2.12	2.39
Input Current @ 277V (A)		0.23	0.42	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09
Input Current @ 347V (A)		0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.60	1.68
Input Current @ 480V (A)		0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28
Optics											
T2	4000K/5000K Lumens	6,116	11,951	17,833	23,663	29,196	34,937	41,317	46,814	52,221	67,817
	3000K Lumens	5,414	10,579	15,786	20,868	25,843	30,926	36,574	41,440	46,226	51,180
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	6,493	12,688	18,932	25,015	30,994	37,090	43,863	49,699	55,439	61,380
	3000K Lumens	5,748	11,231	16,759	22,143	27,436	32,832	38,828	43,994	49,075	54,334
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,234	12,181	18,176	24,017	29,756	35,809	42,111	47,715	53,225	58,830
	3000K Lumens	5,518	10,783	16,089	21,260	26,340	31,521	37,277	42,237	47,115	52,165
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,372	12,453	18,580	24,550	30,418	36,400	43,048	48,776	54,409	60,239
	3000K Lumens	5,640	11,023	16,447	21,732	26,928	32,221	38,108	43,177	48,163	53,324
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,270	12,252	18,282	24,156	29,929	35,815	42,356	47,892	53,534	59,271
	3000K Lumens	6,550	10,845	16,183	21,383	26,493	31,703	37,494	42,483	47,388	52,457
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,188	12,094	18,045	23,844	29,543	35,352	41,809	47,372	52,843	58,506
	3000K Lumens	5,479	10,706	15,973	21,107	26,151	31,294	37,009	41,934	46,777	51,790
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,105	11,831	17,803	23,522	29,144	34,877	41,245	46,734	52,130	57,717
	3000K Lumens	5,404	10,561	15,758	20,822	26,788	30,873	36,510	41,369	46,145	51,091
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,233	12,180	18,174	24,013	29,753	35,604	42,106	47,708	53,218	58,921
	3000K Lumens	6,517	10,782	16,088	21,256	26,337	31,517	37,272	42,231	47,109	52,157
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G6	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,922	11,672	17,268	22,816	28,269	33,829	40,006	45,330	60,666	55,984
	3000K Lumens	5,242	10,244	16,286	20,197	25,024	29,945	35,413	40,126	44,761	49,557
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,429	12,563	18,746	24,768	30,688	36,723	43,429	49,208	54,891	60,775
	3000K Lumens	5,691	11,121	16,594	21,925	27,165	32,507	38,443	43,559	48,590	53,798
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	6,647	12,794	19,080	25,224	31,253	37,400	44,228	50,114	66,902	61,893
	3000K Lumens	6,796	11,325	16,898	22,328	27,665	33,106	39,151	44,361	49,484	54,788
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B6-U0-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	6,564	12,828	18,141	25,291	31,336	37,499	44,347	50,248	56,051	62,058
	3000K Lumens	6,810	11,355	16,944	22,388	27,739	33,194	39,256	44,480	49,616	54,934
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	6,478	10,703	15,970	21,102	26,145	31,286	37,001	41,924	46,765	61,777
	3000K Lumens	4,848	9,474	14,137	18,679	23,144	27,694	32,763	37,111	41,396	46,833
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G6	B3-U0-G5	B3-U0-G5	B3-U0-G6
RW	4000K/5000K Lumens	6,371	12,449	18,676	24,544	30,411	36,392	43,037	48,764	54,386	60,225
	3000K Lumens	5,640	11,020	16,443	21,726	26,820	32,214	38,096	43,166	48,151	53,311
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	6,394	12,494	18,644	24,634	30,521	36,524	43,194	48,942	54,593	60,444
	3000K Lumens	5,660	11,060	16,504	21,806	27,017	32,331	38,235	43,323	48,326	53,505
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (800MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		44	85	124	171	210	249	295	334	374	419
Input Current @ 120V (A)		0.39	0.77	1.13	1.54	1.90	2.26	2.67	3.03	3.39	3.80
Input Current @ 208V (A)		0.22	0.44	0.62	0.88	1.06	1.24	1.50	1.68	1.87	2.12
Input Current @ 240V (A)		0.19	0.38	0.54	0.76	0.92	1.08	1.30	1.46	1.62	1.84
Input Current @ 277V (A)		0.17	0.36	0.47	0.72	0.83	0.85	1.18	1.31	1.42	1.67
Input Current @ 347V (A)		0.15	0.24	0.38	0.49	0.63	0.77	0.87	1.01	1.15	1.52
Input Current @ 480V (A)		0.11	0.18	0.28	0.37	0.48	0.59	0.66	0.77	0.88	0.96
Optics											
T2	4000K/5000K Lumens	4,941	8,656	14,408	19,038	23,588	28,227	33,382	37,823	42,191	46,713
	3000K Lumens	4,374	8,547	12,754	16,852	20,880	24,887	29,550	33,481	37,347	41,350
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	5,246	10,251	15,286	20,211	25,041	29,866	35,439	40,154	44,791	49,592
	3000K Lumens	4,644	8,074	13,640	17,891	22,166	26,626	31,371	35,544	38,649	43,899
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3	4000K/5000K Lumens	5,037	8,842	14,685	19,404	24,041	28,770	34,024	38,551	43,003	47,612
	3000K Lumens	4,459	8,712	12,999	17,176	21,281	25,467	30,118	34,125	38,066	42,146
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,148	10,061	15,011	19,835	24,676	29,409	34,780	39,408	43,859	48,669
	3000K Lumens	4,657	8,906	13,288	17,568	21,755	26,033	30,787	34,884	38,913	43,082
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	5,066	9,899	14,770	19,516	24,181	28,936	34,221	38,774	43,252	47,888
	3000K Lumens	4,484	8,763	13,074	17,276	21,405	25,614	30,292	34,323	38,287	42,390
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G6	B3-U0-G6	B3-U0-G5
T4W	4000K/5000K Lumens	5,000	9,771	14,579	19,264	23,869	28,662	33,779	38,274	42,694	47,269
	3000K Lumens	4,426	8,649	12,905	17,062	21,129	25,283	29,901	33,880	37,793	41,843
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	4,933	9,639	14,383	19,005	23,547	28,178	33,324	37,758	42,118	46,532
	3000K Lumens	4,367	8,532	12,732	16,823	20,844	24,943	29,498	33,423	37,283	41,279
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	5,035	9,841	14,683	19,401	24,039	28,766	34,018	38,548	42,997	47,605
	3000K Lumens	4,458	8,711	12,997	17,174	21,279	25,464	30,114	34,121	38,061	42,140
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	4,784	9,350	13,951	18,434	22,840	27,332	32,323	36,524	40,854	45,232
	3000K Lumens	4,235	8,277	12,349	16,318	20,218	24,194	28,612	32,420	36,164	40,039
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	5,194	10,150	15,145	20,011	24,794	29,870	35,088	39,757	44,349	49,102
	3000K Lumens	4,598	8,985	13,406	17,714	21,948	26,254	31,050	35,193	39,268	43,465
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
5MQ	4000K/5000K Lumens	5,290	10,337	15,424	20,380	25,250	30,217	35,734	40,489	45,165	50,006
	3000K Lumens	4,683	9,150	13,653	18,040	22,351	26,748	31,632	35,841	39,980	44,265
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	5,304	10,355	15,465	20,434	26,318	30,297	35,830	40,597	45,286	50,139
	3000K Lumens	4,696	9,175	13,690	18,088	22,411	26,819	31,717	35,936	40,087	44,383
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	4,426	8,648	12,903	17,049	21,124	25,278	29,894	33,872	37,784	41,832
	3000K Lumens	3,918	7,655	11,422	15,092	18,699	22,376	26,462	29,983	33,445	37,030
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	6,147	10,058	15,009	19,830	24,570	29,402	34,771	39,399	43,949	48,558
	3000K Lumens	4,556	8,903	13,286	17,554	21,749	26,027	30,779	34,876	38,904	43,072
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
AFL	4000K/5000K Lumens	5,186	10,095	15,053	19,903	24,659	29,509	34,898	39,542	44,108	48,835
	3000K Lumens	4,573	8,936	13,334	17,618	21,828	26,121	30,892	35,003	39,044	43,229
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (600MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		34	66	96	129	162	193	226	257	290	323
Input Current @ 120V (A)		0.30	0.58	0.86	1.16	1.44	1.73	2.03	2.33	2.59	2.89
Input Current @ 208V (A)		0.17	0.34	0.49	0.65	0.84	0.99	1.14	1.30	1.48	1.63
Input Current @ 240V (A)		0.15	0.30	0.43	0.56	0.74	0.87	1.00	1.13	1.30	1.43
Input Current @ 277V (A)		0.14	0.28	0.41	0.52	0.69	0.81	0.93	1.04	1.22	1.33
Input Current @ 347V (A)		0.11	0.19	0.30	0.39	0.49	0.60	0.69	0.77	0.90	0.99
Input Current @ 480V (A)		0.08	0.16	0.24	0.30	0.38	0.48	0.53	0.59	0.71	0.77
Optics											
T2	4000K/5000K Lumens	4,029	7,874	11,749	15,525	19,235	23,019	27,222	30,844	34,406	38,093
	3000K Lumens	3,566	6,970	10,400	13,743	17,027	20,376	24,097	27,303	30,456	33,720
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T2R	4000K/5000K Lumens	4,278	8,360	12,474	16,482	20,421	24,437	28,900	32,745	36,527	40,441
	3000K Lumens	3,787	7,400	11,042	14,590	18,077	21,632	25,582	28,986	32,334	35,798
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3	4000K/6000K Lumens	4,107	8,026	11,976	15,824	18,605	23,461	27,746	31,438	35,068	38,827
	3000K Lumens	3,636	7,105	10,601	14,007	17,354	20,768	24,561	27,829	31,042	34,370
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T3R	4000K/5000K Lumens	4,198	8,205	12,242	16,175	20,041	23,982	28,363	32,137	35,848	39,689
	3000K Lumens	3,716	7,263	10,837	14,318	17,740	21,229	25,107	28,448	31,733	35,133
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	4,131	8,072	12,046	16,915	19,719	23,597	27,907	31,620	35,272	38,052
	3000K Lumens	3,657	7,145	10,662	14,088	17,465	20,888	24,703	27,890	31,223	34,569
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	4000K/5000K Lumens	4,077	7,968	11,889	15,710	19,465	23,292	27,546	31,212	34,816	38,547
	3000K Lumens	3,609	7,053	10,524	13,906	17,230	20,618	24,384	27,628	30,819	34,122
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL2	4000K/5000K Lumens	4,022	7,861	11,729	15,498	19,202	22,979	27,175	30,791	34,347	38,028
	3000K Lumens	3,560	6,959	10,383	13,719	16,998	20,341	24,055	27,256	30,404	33,662
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL3	4000K/5000K Lumens	4,106	8,025	11,974	15,821	19,803	23,458	27,742	31,433	35,064	38,821
	3000K Lumens	3,635	7,104	10,599	14,005	17,353	20,765	24,557	27,824	31,039	34,364
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	3,902	7,624	11,377	15,033	18,626	22,289	26,359	29,867	33,315	36,886
	3000K Lumens	3,454	6,749	10,071	13,307	16,488	19,730	23,333	26,438	29,491	32,651
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5
SNQ	4000K/5000K Lumens	4,236	8,277	12,351	16,319	20,219	24,196	28,614	32,422	36,165	40,042
	3000K Lumens	3,750	7,327	10,933	14,446	17,898	21,418	25,329	29,700	32,014	35,445
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B6-U0-G3
SMQ	4000K/5000K Lumens	4,314	8,429	12,578	16,619	20,591	24,641	29,141	33,019	36,832	40,779
	3000K Lumens	3,819	7,461	11,134	14,711	18,227	21,812	25,796	29,228	32,604	36,098
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
SWQ	4000K/5000K Lumens	4,325	8,452	12,611	16,664	20,646	24,707	29,219	33,106	36,930	40,888
	3000K Lumens	3,829	7,482	11,163	14,751	18,276	21,871	25,865	29,305	32,690	36,194
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
SLL/SLR	4000K/5000K Lumens	3,609	7,052	10,522	13,903	17,226	20,613	24,378	27,622	30,812	34,114
	3000K Lumens	3,195	6,242	9,314	12,307	15,248	18,247	21,579	24,451	27,275	30,198
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	4,197	9,202	12,239	16,171	20,035	23,977	29,356	32,129	35,839	39,580
	3000K Lumens	3,715	7,260	10,834	14,315	17,736	21,224	25,101	28,441	31,725	35,125
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B6-U0-G3	B5-U0-G3	B5-U0-G3
AFL	4000K/5000K Lumens	4,213	8,232	12,284	16,230	20,109	24,064	28,469	32,246	35,969	39,824
	3000K Lumens	3,729	7,287	10,874	14,367	17,800	21,301	25,192	29,544	31,940	35,252
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

CONTROL OPTIONS

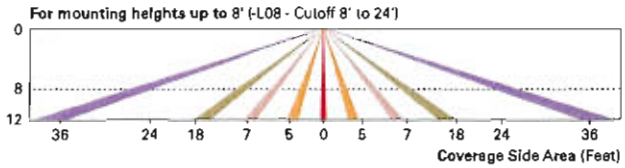
0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

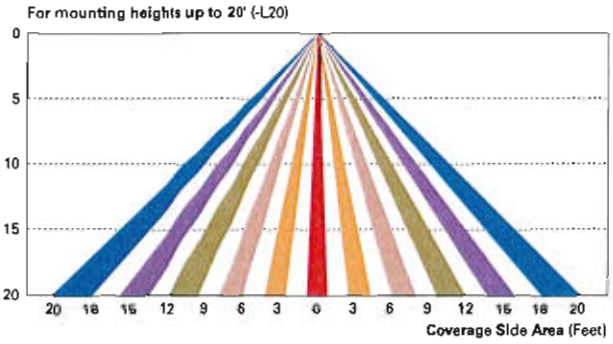
Photocontrol (P, R and PER7)
Optional button-type photocontrol (P) and photocontrol receptecles (R and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

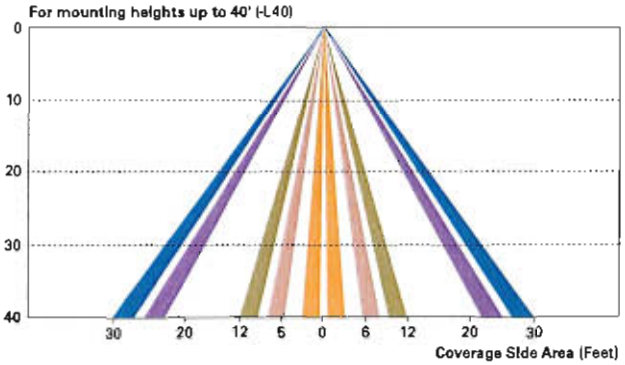
After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

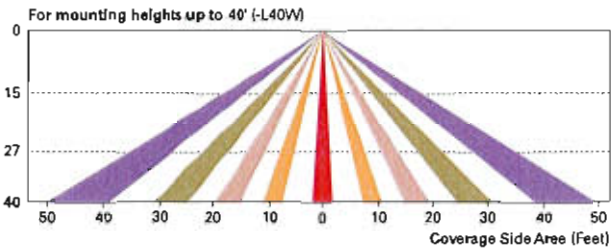
Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupency seneor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX seneor is factory preset to turn the luminaire off efter five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintein steedy output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is e wireless tool utilized for changing the dimming level, time deley, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage. pattern for mounting heights from 8'-40'.

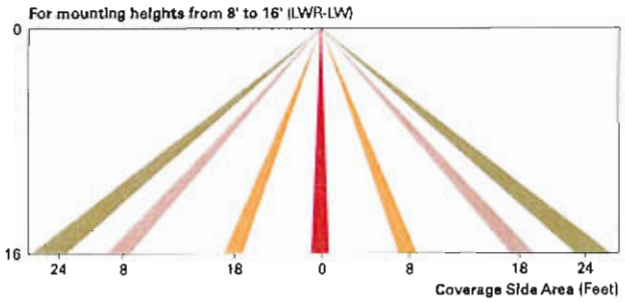


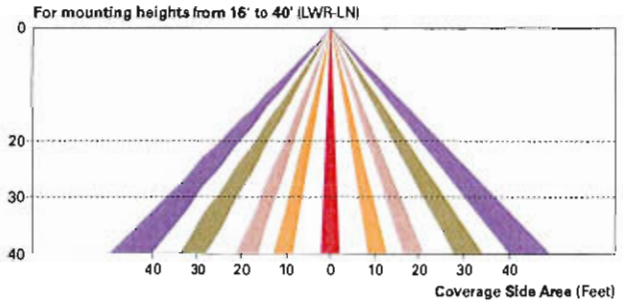






LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.





WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)
The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

LumenSafe Integrated Network Security Camera (LD)
Eaton brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

ORDERING INFORMATION

Sample Number: GLEON-AF-04-LED-E1-T3-GM-OM

Product Family [1, 2]	Light Engine	Number of Light Squares [3]	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	**AF**=1A Drive Current	**01**=1 **02**=2 **03**=3 **04**=4 **05**=5 [4] **06**=6 **07**=7 [5] **08**=8 [5] **09**=9 [6] **10**=10 [6]	**LED**=Solid State Light Emitting Diodes	**E1**=120-277V **347**=347V [7] **480**=480V [7, 8]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **5NQ**=Type V Narrow **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=80° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	[Blank]=Arm for Round or Square Pole **EA**=Extended Arm [9] **MA**=Mast Arm Adapter [10] **WM**=Wall Mount **QM**=Quick Mount Arm (Standard Length) [11] **QMEA**=Quick Mount Arm (Extended Length) [12]

Options (Add es Suffix)

7030=70 CRI 3000K [13]
8030=80 CRI 3000K [14]
7050=70 CRI 5000K [13]
7060=70 CRI 6000K [13]
600=Drive Current Factory Set to Nominal 600mA [15]
800=Drive Current Factory Set to Nominal 800mA [15]
1200=Drive Current Factory Set to Nominal 1200mA [15, 16]
F=Single Fuse (120, 277 or 347V. Must Specify Voltage)
FF=Double Fuse (208, 240 or 480V. Must Specify Voltage)
2L=Two Circuits [12, 18]
DIM=External 0-10V Dimming Leads [19, 20]
P=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voletage) [21]
PER7=NEMA 7-PIN Twistlock Photocontrol Receptecle [21]
R=NEMA Twistlock Photocontrol Receptacle [21]
AHD145=After Hours Dim, 5 Hours [22]
AHD245=After Hours Dim, 6 Hours [22]
AHD255=After Hours Dim, 7 Hours [22]
AHD355=After Hours Dim, 8 Hours [22]
HA=50°C High Ambient [23]
MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height [24, 25]
MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height [24, 26]
MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height [24, 27]
MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range) [24, 28]
MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height [24, 25, 29]
MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height [24, 26, 29]
MS/X-L40=Bi-Level Motion Sensor, 21' - 40' Mounting Height [22, 27, 29]
MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height (Wide Range) [24, 28, 29]
MS-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height [24, 25]
MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height [24, 26]
MS-L40=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height [24, 27]
MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height (Wide Range) [24, 28]
LWR-LW=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [30, (A)]
LWR-LN=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [30, (A)]
WOLC-7P-10A=WaveLinx Wireless Outdoor Lighting Control Module [31]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
MT=Factory Installed Mesh Top
TH=Tool-less Door Hardware
LCF=Light Square Trim Plate Painted to Match Housing [31]
HSS=Factory Installed House Side Shield [32]
CE=CE Marking [33]

Accessories (Order Separately)

OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V
OA/RA1027=NEMA Photocontrol - 480V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
MA1252=10kV Surge Module Replacement
MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1037-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1197-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1188-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1189-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1190-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1191-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1036-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1039-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1192-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon
MA1193-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1194-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1195-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon
FSIR-100=Wireless Configuretion Tool for Occupency Sensor [34]
GLEON-MT1=Field Installed Mesh Top for 1-4 Light Squares
GLEON-MT2=Field Installed Mesh Top for 5-6 Light Squares
GLEON-MT3=Field Installed Mesh Top for 7-8 Light Squares
GLEON-MT4=Field Installed Mesh Top for 9-10 Light Squares
GLEON-QM=Quick Mount Arm Kit [11]
GLEON-QMEA=Quick Mount Extended Arm Kit [11]
LS/HSS=Field Installed House Side Shield [32, 33]
WOLC-7P-10A=WaveLinx Outdoor Control Module (7-pin) [35, (B)]

NOTES:
1 Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2 DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3 Standard 4000K CCT and minimum 70 CRI. 4 Not compatible with MS/4-LXX or MS/1-LXX sensors. 5 Not compatible with extended quick mount arm (QMEA). 6 Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA). 7 Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A. 8 Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 9 May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table. 10 Factory installed. 11 Maximum 6 light squares. 12 Maximum 6 light squares. 13 Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. 14 Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. 15 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. These files are published on the Galleon luminaire product page on the website. 16 Not available with HA option. 17 2L is not available with MS, MS/X or MS/DIM at 347V or 480V. 2L in AF-02 through AF-04 requires a larger housing, normally used for AF-05 or AF-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. 18 Not available with LumaWatt Pro wireless sensors. 19 Cannot be used with other control options. 20 Low voltage control lead brought out 18" outside fixture. 21 Not available if any "MS" sensor is selected. Motion sensor has an integral photocell. 22 Requires the use of P photocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. 23 50°C lumen maintenance data applies to 600mA, 800mA and 1A drive currents. 24 The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information. 25 Approximately 22' detection diameter at 8' mounting height. 26 Approximately 40' detection diameter at 20' mounting height. 27 Approximately 60' detection diameter at 40' mounting height. 28 Approximately 100' detection diameter at 40' mounting height. 29 Replace X with number of Light Squares operating in low output mode. 30 LumaWatt Pro wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1 and LWP-PoE8in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information. 31 Not available with house side shield (HSS). 32 Only for use with SL2, SL3, SL4 and AFL distributions. The Light Squara trim plate is painted black when the HSS option is selected. 33 CE is not available with the LWR, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only. 34 One required for each Light Square. 35 Requires 7-pin NEMA twistlock photocontrol receptacle.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul	
L=LumenSafe Technology®	**D**=Dome Camera	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card **V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**R**=Cellular, Factory Installed Rogers SIM Cerd **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

*Consult LumenSafe system pages for additional details and compatibility. Not available with 9-10 light square housing. Not available with 347V, 480V or high ambient options.

McGraw-Edison

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #	GLEON-AF-01-LED-T4W-800	Type
Project		F2
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Extruded eluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing end die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical
LED drivers ere mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

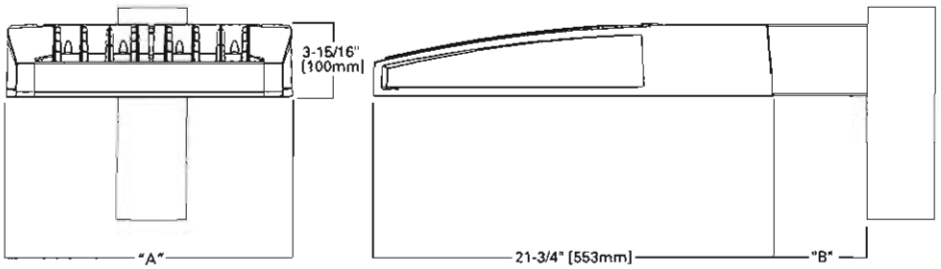
GLEON
GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

LumenSafe Technology
CLICK HERE

DIMENSIONS



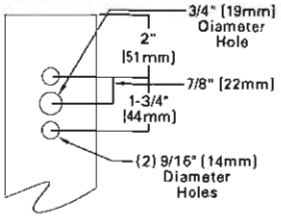
DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length [1]	Weight with Arm (lbs.)	EPA with Arm [2] (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN

TYPE "N"



CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

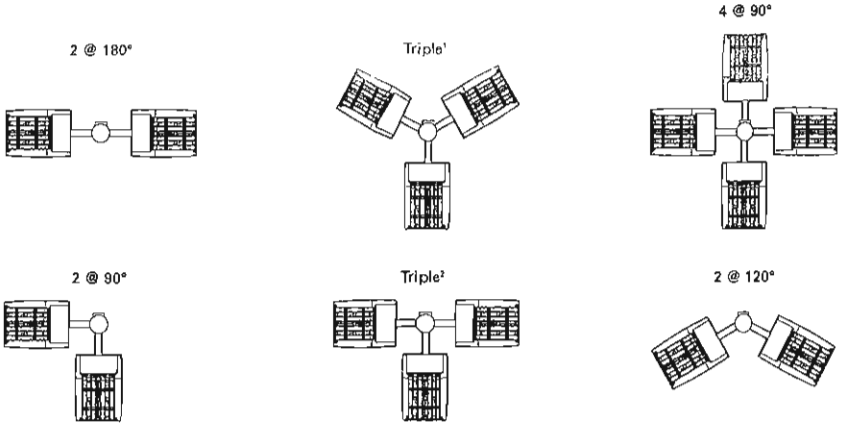
ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

*www.designlights.org

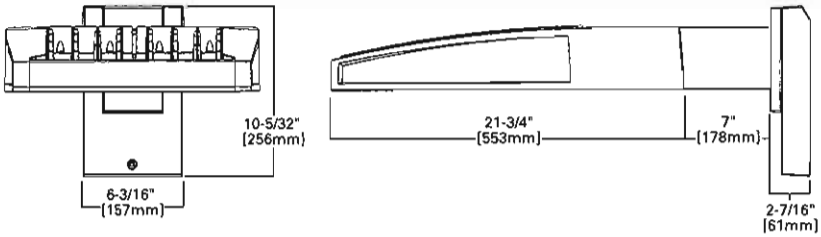
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

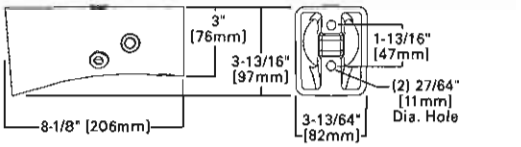


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°

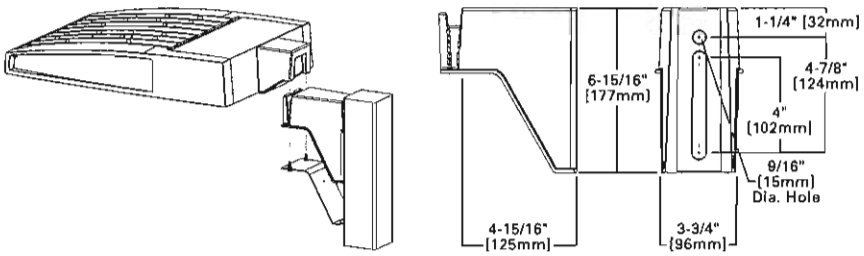
STANDARD WALL MOUNT

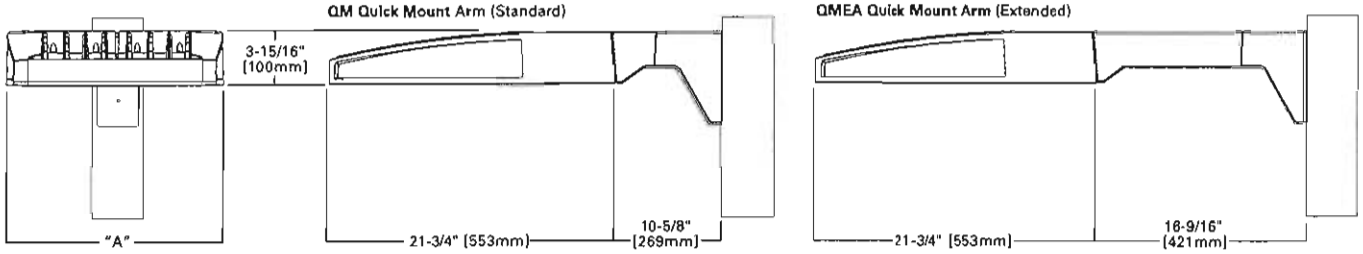


MAST ARM MOUNT



QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



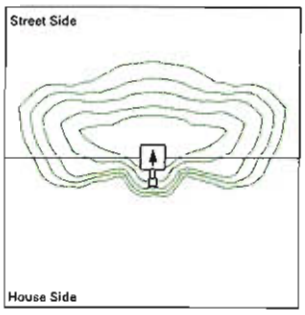


QUICK MOUNT ARM DATA

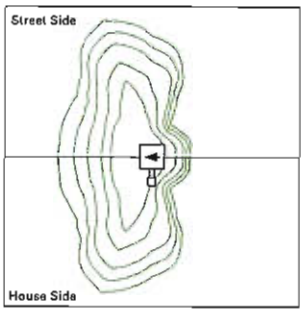
Number of Light Squares [1,2]	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (384mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 [3]	21-5/8" (549mm)	46 (20.81 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

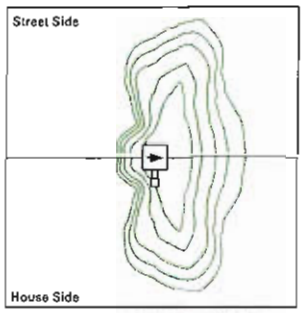
OPTIC ORIENTATION



Standard



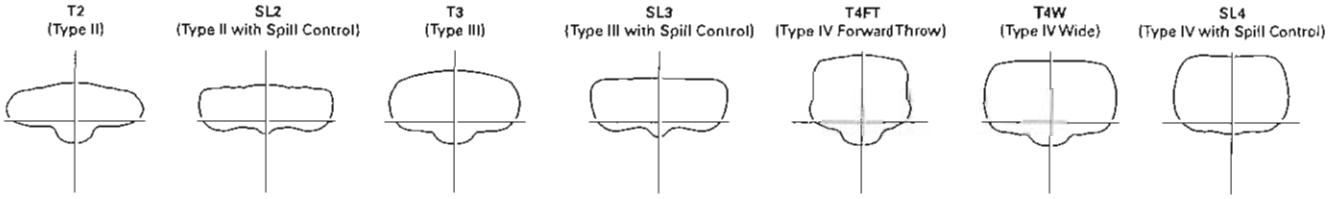
Optics Rotated Left @ 90° [L90]



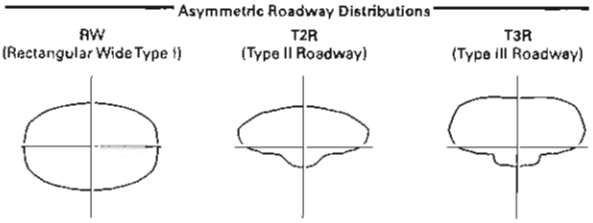
Optics Rotated Right @ 90° [R90]

OPTICAL DISTRIBUTIONS

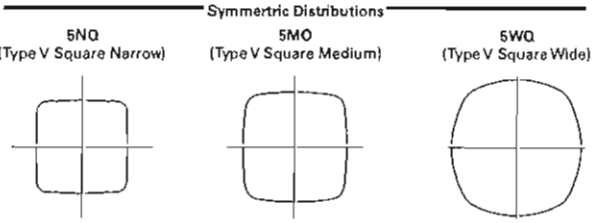
Asymmetric Area Distributions



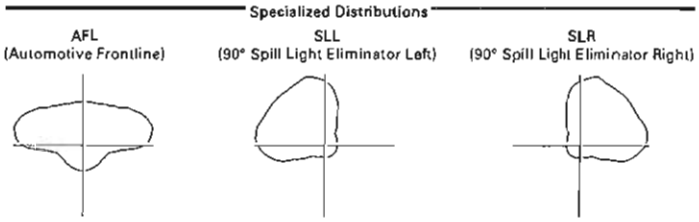
Asymmetric Roadway Distributions



Symmetric Distributions

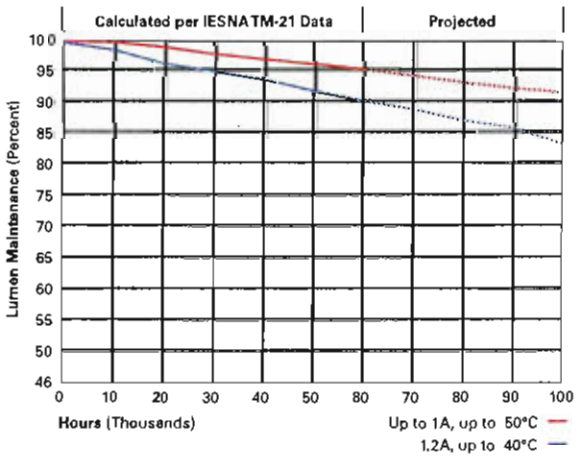


Specialized Distributions



LUMEN MAINTENANCE

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	416,000
1.2A	Up to 40°C	> 90%	205,000



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

NOMINAL POWER LUMENS (1.2A)

Number of Light Squeres		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		67	129	191	258	320	382	448	511	575	640
Input Current @ 120V (A)		0.58	1.16	1.78	2.31	2.94	3.56	4.09	4.71	5.34	5.87
Input Current @ 208V (A)		0.33	0.63	0.93	1.27	1.57	1.87	2.22	2.52	2.8	3.14
Input Current @ 240V (A)		0.29	0.55	0.80	1.10	1.35	1.61	1.93	2.18	2.41	2.71
Input Current @ 277V (A)		0.25	0.48	0.70	0.96	1.18	1.39	1.69	1.90	2.09	2.38
Input Current @ 347V (A)		0.20	0.38	0.57	0.78	0.96	1.15	1.36	1.54	1.72	1.92
Input Current @ 480V (A)		0.15	0.30	0.43	0.60	0.73	0.85	1.03	1.16	1.28	1.45
Optics											
T2	4000K/5000K Lumens	6,709	13,111	19,562	25,848	32,026	38,325	45,324	51,355	57,286	63,424
	3000K Lumens	5,939	11,606	17,316	22,881	28,348	33,925	40,121	45,459	50,710	56,143
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	7,122	13,919	20,769	27,442	34,000	40,687	48,117	54,519	60,816	67,333
	3000K Lumens	5,939	11,606	17,316	22,891	28,349	33,925	40,121	45,459	50,710	56,143
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,838	13,363	19,939	26,346	32,642	39,062	46,196	52,343	59,389	64,646
	3000K Lumens	8,053	11,829	17,650	23,321	28,996	34,678	40,993	46,334	61,685	57,225
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G6	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,990	13,660	20,382	26,931	33,368	39,930	47,223	63,606	59,686	68,081
	3000K Lumens	6,188	12,092	18,042	23,839	29,537	35,346	41,802	47,364	52,834	58,495
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,878	13,440	20,055	26,499	32,832	39,289	46,464	52,846	58,726	65,020
	3000K Lumens	8,088	11,897	17,763	23,457	29,063	34,779	41,130	48,602	51,884	57,656
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G6	B4-U0-G6
T4W	4000K/5000K Lumens	8,789	13,267	19,795	26,158	32,408	38,781	45,884	51,867	67,968	84,180
	3000K Lumens	6,010	11,744	17,523	23,153	28,668	34,329	40,588	46,001	51,313	56,812
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,697	13,088	18,529	25,804	31,970	38,259	45,245	51,287	57,186	63,315
	3000K Lumens	5,828	11,885	17,287	22,842	28,300	33,867	40,051	46,382	50,621	56,046
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G6	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	8,837	13,361	19,936	26,342	32,639	39,057	46,189	62,336	58,380	64,636
	3000K Lumens	6,052	11,827	17,647	23,318	28,892	34,573	40,887	48,328	51,678	57,216
	BUG Reting	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,496	12,695	18,943	25,029	31,011	37,110	43,886	49,727	55,470	61,414
	3000K Lumens	5,760	11,238	16,768	22,156	27,451	32,850	38,848	44,018	49,102	64,364
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G6	B3-U0-G5	B3-U0-G5	B3-U0-G6	B3-U0-G5
5NQ	4000K/5000K Lumens	7,052	13,781	20,564	27,171	33,664	40,285	47,841	53,981	60,216	66,669
	3000K Lumens	6,242	12,199	18,203	24,052	28,789	35,660	42,172	47,784	53,302	59,015
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	7,182	14,034	20,842	27,671	34,284	41,027	49,518	54,875	61,323	67,896
	3000K Lumens	6,358	12,423	18,538	24,494	30,348	36,317	42,948	48,864	54,283	60,102
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B6-U0-G5
5WQ	4000K/5000K Lumens	7,201	14,073	20,998	27,744	34,375	41,136	48,648	55,121	61,487	68,077
	3000K Lumens	6,374	12,457	18,587	24,559	30,429	36,414	43,063	48,793	54,428	60,262
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	6,009	11,741	17,519	23,148	28,681	34,321	40,589	45,990	51,301	56,798
	3000K Lumens	5,318	10,393	15,508	20,491	25,388	30,381	35,929	40,710	45,412	50,278
	BUG Reting	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
RW	4000K/5000K Lumens	6,988	13,657	20,378	26,925	33,360	39,821	47,211	53,494	69,672	66,066
	3000K Lumens	8,187	12,089	18,038	23,834	29,530	35,338	41,781	47,353	52,822	58,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	7,014	13,706	20,452	27,023	33,481	40,066	47,383	53,688	59,888	66,306
	3000K Lumens	6,209	12,133	18,104	23,921	29,637	35,466	41,943	47,525	53,013	58,694
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (1A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		59	113	166	225	279	333	391	445	501	558
Input Current @ 120V (A)		0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.6	5.07
Input Current @ 208V (A)		0.29	0.56	0.82	1.11	1.37	1.64	1.93	2.19	2.46	2.75
Input Current @ 240V (A)		0.26	0.48	0.71	0.96	1.19	1.41	1.67	1.89	2.12	2.39
Input Current @ 277V (A)		0.23	0.42	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09
Input Current @ 347V (A)		0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.50	1.68
Input Current @ 480V (A)		0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28
Optics											
T2	4000K/5000K Lumens	6,116	11,851	17,833	23,663	29,195	34,937	41,317	48,814	52,221	57,817
	3000K Lumens	5,414	10,578	15,786	20,858	25,843	30,926	38,574	41,440	46,226	51,180
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	6,493	12,688	18,832	25,015	30,994	37,090	43,853	48,689	55,439	61,380
	3000K Lumens	5,748	11,231	16,758	22,143	27,436	32,832	38,828	43,994	49,075	54,334
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,234	12,181	18,176	24,017	29,756	35,609	42,111	47,715	53,225	58,930
	3000K Lumens	5,518	10,783	16,088	21,250	26,340	31,521	37,277	42,237	47,115	52,165
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,372	12,453	18,580	24,550	30,418	36,400	43,048	48,775	54,409	60,239
	3000K Lumens	5,640	11,023	16,447	21,732	26,828	32,221	38,106	43,177	48,163	53,324
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,270	12,252	18,282	24,158	29,929	35,815	42,356	47,992	53,534	59,271
	3000K Lumens	5,550	10,845	15,183	21,383	26,483	31,703	37,494	42,483	47,388	52,467
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/6000K Lumens	5,188	12,094	18,045	23,844	28,543	35,352	41,809	47,372	52,843	58,506
	3000K Lumens	5,479	10,705	15,973	21,107	25,151	31,294	37,009	41,934	46,777	51,790
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	5,105	11,931	17,803	23,522	28,144	34,877	41,245	46,734	52,130	57,717
	3000K Lumens	5,404	10,581	15,759	20,822	25,798	30,873	35,510	41,368	46,145	51,091
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,233	12,180	18,174	24,013	29,753	35,504	42,105	47,708	53,218	58,821
	3000K Lumens	5,517	10,782	15,088	21,256	26,337	31,517	37,272	42,231	47,109	52,157
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	5,922	11,572	17,268	22,816	28,269	33,829	40,006	45,330	50,566	55,984
	3000K Lumens	5,242	10,244	15,286	20,197	25,024	29,945	35,413	40,125	44,761	49,557
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,429	12,563	18,746	24,758	30,688	36,723	43,429	49,208	54,891	60,775
	3000K Lumens	5,691	11,121	16,594	21,925	27,165	32,507	38,443	43,559	48,590	53,798
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	6,547	12,794	19,090	25,224	31,253	37,400	44,228	50,114	55,902	61,893
	3000K Lumens	5,795	11,325	15,898	22,328	27,655	33,106	39,151	44,361	49,484	54,788
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	6,564	12,828	19,141	25,291	31,336	37,499	44,347	50,248	56,051	62,058
	3000K Lumens	5,810	11,355	16,944	22,388	27,739	33,194	39,256	44,480	49,616	54,934
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	5,478	10,703	15,970	21,102	26,145	31,286	37,001	41,924	46,766	51,777
	3000K Lumens	4,849	9,474	14,137	18,679	23,144	27,694	32,753	37,111	41,396	45,833
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	6,371	12,449	18,575	24,544	30,411	36,392	43,037	48,764	54,395	60,225
	3000K Lumens	5,640	11,020	16,443	21,725	26,920	32,214	38,096	43,165	48,151	53,311
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	6,394	12,494	18,644	24,634	30,521	36,524	43,194	48,942	54,583	60,444
	3000K Lumens	5,660	11,060	16,504	21,808	27,017	32,331	38,235	43,323	48,325	53,506
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (800MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		44	85	124	171	210	249	295	334	374	419
Input Current @ 120V (A)		0.39	0.77	1.13	1.54	1.90	2.26	2.67	3.03	3.39	3.80
Input Current @ 208V (A)		0.22	0.44	0.62	0.88	1.06	1.24	1.50	1.68	1.87	2.12
Input Current @ 240V (A)		0.19	0.38	0.54	0.76	0.92	1.08	1.30	1.46	1.62	1.84
Input Current @ 277V (A)		0.17	0.38	0.47	0.72	0.83	0.95	1.19	1.31	1.42	1.67
Input Current @ 347V (A)		0.15	0.24	0.38	0.49	0.63	0.77	0.87	1.01	1.15	1.52
Input Current @ 480V (A)		0.11	0.18	0.29	0.37	0.48	0.59	0.66	0.77	0.88	0.96
Optics											
T2	4000K/5000K Lumens	4,941	9,656	14,408	19,038	23,588	28,227	33,382	37,823	42,191	46,713
	3000K Lumens	4,374	8,547	12,754	16,852	20,880	24,987	29,550	33,481	37,347	41,350
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	5,246	10,251	15,296	20,211	25,041	29,966	35,439	40,154	44,791	49,592
	3000K Lumens	4,644	9,074	13,540	17,891	22,168	26,526	31,371	35,544	39,649	43,899
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3	4000K/5000K Lumens	5,037	9,842	14,685	19,404	24,041	28,770	34,024	38,551	43,003	47,612
	3000K Lumens	4,459	8,712	12,999	17,176	21,281	25,467	30,118	34,125	38,066	42,146
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,148	10,061	16,011	19,835	24,676	29,409	34,780	39,408	43,959	48,669
	3000K Lumens	4,657	8,906	13,288	17,668	21,766	26,033	30,787	34,864	38,913	43,082
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	5,066	9,899	14,770	19,516	24,181	28,936	34,221	38,774	43,252	47,888
	3000K Lumens	4,484	8,763	13,074	17,276	21,405	26,614	30,292	34,323	38,287	42,390
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	4000K/6000K Lumens	5,000	8,771	14,579	19,264	23,869	28,562	33,779	38,274	42,694	47,269
	3000K Lumens	4,426	8,648	12,905	17,052	21,129	26,283	29,901	33,880	37,793	41,843
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	4,933	9,639	14,383	19,005	23,547	28,178	33,324	37,758	42,118	46,632
	3000K Lumens	4,367	8,532	12,732	16,823	20,844	24,943	29,498	33,423	37,283	41,279
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G6	B4-U0-G5
SL3	4000K/5000K Lumens	6,036	9,841	14,683	19,401	24,039	28,766	34,019	38,546	42,997	47,606
	3000K Lumens	4,458	8,711	12,997	17,174	21,279	25,464	30,114	34,121	39,061	42,140
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	4,794	9,350	13,951	18,434	22,840	27,332	32,323	36,624	40,854	45,232
	3000K Lumens	4,235	8,277	12,349	16,318	20,218	24,194	28,612	32,420	36,164	40,039
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B2-U0-G5	B3-U0-G5	B3-U0-G6	B3-U0-G5
5NQ	4000K/5000K Lumens	5,194	10,160	15,145	20,011	24,794	29,670	35,088	39,757	44,349	49,102
	3000K Lumens	4,598	8,985	13,406	17,714	21,948	26,264	31,060	35,193	39,268	43,465
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
5MQ	4000K/5000K Lumens	5,290	10,337	15,424	20,380	25,250	30,217	35,734	40,499	45,165	50,006
	3000K Lumens	4,683	9,150	13,653	18,040	22,351	26,748	31,632	35,941	39,990	44,265
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	5,304	10,365	15,465	20,434	25,318	30,297	35,830	40,597	45,296	50,139
	3000K Lumens	4,695	9,175	13,690	18,098	22,411	26,819	31,717	35,936	40,087	44,383
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	4,426	8,648	12,903	17,049	21,124	25,278	29,894	33,872	37,794	41,932
	3000K Lumens	3,918	7,655	11,422	15,092	18,699	22,376	26,462	29,963	33,446	37,030
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	5,147	10,058	15,009	19,830	24,570	29,402	34,771	39,399	43,949	49,658
	3000K Lumens	4,556	8,903	13,286	17,554	21,749	26,027	30,779	34,876	38,904	43,072
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
AFL	4000K/5000K Lumens	5,166	10,095	15,063	19,903	24,659	29,509	34,899	39,542	44,108	48,635
	3000K Lumens	4,573	8,936	13,334	17,618	21,828	26,121	30,892	35,003	39,044	43,229
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (600MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		34	66	96	129	162	193	226	257	290	323
Input Current @ 120V (A)		0.30	0.58	0.86	1.16	1.44	1.73	2.03	2.33	2.59	2.89
Input Current @ 208V (A)		0.17	0.34	0.49	0.65	0.84	0.89	1.14	1.30	1.46	1.63
Input Current @ 240V (A)		0.15	0.30	0.43	0.56	0.74	0.87	1.00	1.13	1.30	1.43
Input Current @ 277V (A)		0.14	0.28	0.41	0.52	0.69	0.81	0.83	1.04	1.22	1.33
Input Current @ 347V (A)		0.11	0.19	0.30	0.39	0.49	0.60	0.59	0.77	0.90	0.99
Input Current @ 480V (A)		0.08	0.15	0.24	0.30	0.38	0.48	0.53	0.59	0.71	0.77
Optics											
T2	4000K/5000K Lumens	4,029	7,874	11,749	16,525	19,235	23,019	27,222	30,844	34,406	38,093
	3000K Lumens	3,566	6,970	10,400	13,743	17,027	20,376	24,097	27,303	30,456	33,720
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T2R	4000K/5000K Lumens	4,278	8,360	12,474	16,482	20,421	24,437	28,900	32,745	36,527	40,441
	3000K Lumens	3,787	7,400	11,042	14,590	18,077	21,632	25,582	28,986	32,334	35,796
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3	4000K/5000K Lumens	4,107	8,026	11,976	16,824	19,605	23,461	27,746	31,438	35,068	38,827
	3000K Lumens	3,636	7,105	10,601	14,007	17,354	20,768	24,561	27,829	31,042	34,370
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T3R	4000K/5000K Lumens	4,198	8,205	12,242	16,175	20,041	23,982	28,363	32,137	35,848	39,689
	3000K Lumens	3,718	7,263	10,837	14,318	17,740	21,229	25,107	28,448	31,733	36,133
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	4,131	8,072	12,045	15,915	19,719	23,597	27,907	31,620	35,272	39,052
	3000K Lumens	3,657	7,145	10,652	14,088	17,455	20,888	24,703	27,990	31,223	34,568
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	4000K/5000K Lumens	4,077	7,968	11,889	15,710	19,465	23,292	27,546	31,212	34,816	38,547
	3000K Lumens	3,609	7,053	10,524	13,906	17,230	20,618	24,384	27,629	30,819	34,122
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL2	4000K/5000K Lumens	4,022	7,881	11,729	15,496	19,202	22,979	27,175	30,791	34,347	38,028
	3000K Lumens	3,550	6,959	10,383	13,719	16,998	20,341	24,055	27,256	30,404	33,662
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL3	4000K/5000K Lumens	4,106	8,025	11,974	15,821	18,603	23,458	27,742	31,433	35,064	38,821
	3000K Lumens	3,835	7,104	10,599	14,005	17,353	20,765	24,557	27,824	31,039	34,354
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	3,902	7,624	11,377	15,033	18,626	22,289	26,359	29,867	33,316	36,886
	3000K Lumens	3,454	5,749	10,071	13,307	16,488	19,730	23,333	26,438	29,491	32,651
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	4,236	8,277	12,351	16,319	20,219	24,196	28,614	32,422	36,166	40,042
	3000K Lumens	3,750	7,327	10,933	14,446	17,898	21,418	25,329	28,700	32,014	35,445
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
5MQ	4000K/5000K Lumens	4,314	8,429	12,578	16,619	20,591	24,641	29,141	33,018	36,832	40,779
	3000K Lumens	3,819	7,461	11,134	14,711	18,227	21,812	25,796	29,228	32,604	36,098
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	4,325	8,452	12,611	16,664	20,646	24,707	29,219	33,106	36,930	40,888
	3000K Lumens	3,828	7,482	11,183	14,751	18,276	21,871	25,885	29,305	32,590	35,194
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B6-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
SLL/SLR	4000K/5000K Lumens	3,609	7,052	10,522	13,903	17,226	20,613	24,378	27,822	30,812	34,114
	3000K Lumens	3,195	6,242	9,314	12,307	15,248	18,247	21,579	24,451	27,275	30,198
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	4,197	8,202	12,239	16,171	20,036	23,977	28,356	32,129	35,839	39,680
	3000K Lumens	3,716	7,260	10,834	14,315	17,736	21,224	26,101	28,441	31,725	35,126
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
AFL	4000K/5000K Lumens	4,213	6,232	12,284	16,230	20,109	24,064	28,459	32,246	35,969	39,824
	3000K Lumens	3,729	7,287	10,874	14,367	17,800	21,301	25,192	28,544	31,840	35,252
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

CONTROL OPTIONS

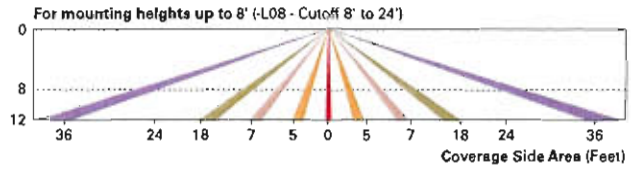
0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

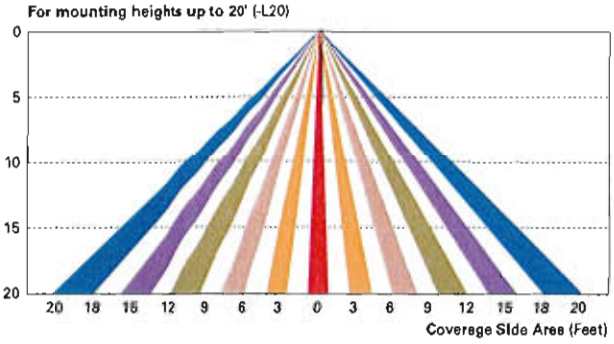
Photocontrol (P, R and PER7)
Optional button-type photocontrol (P) and photocontrol receptacles (R and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

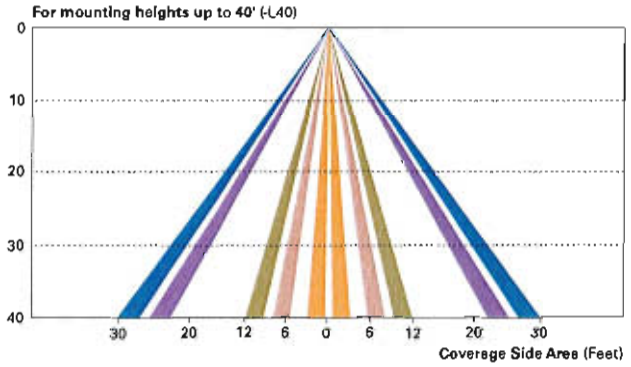
After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

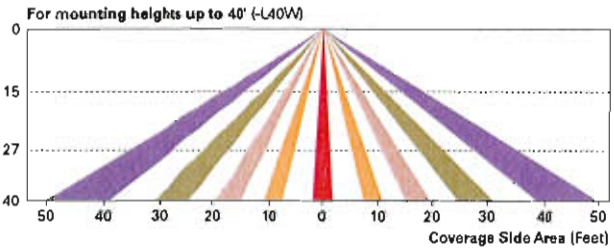
Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.

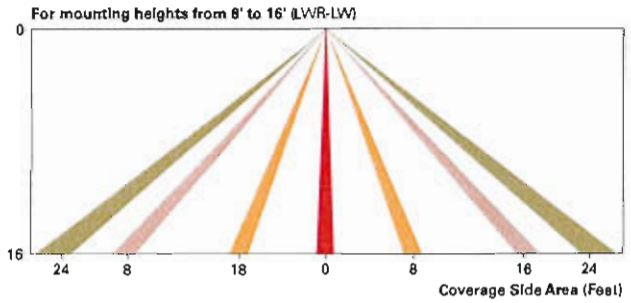


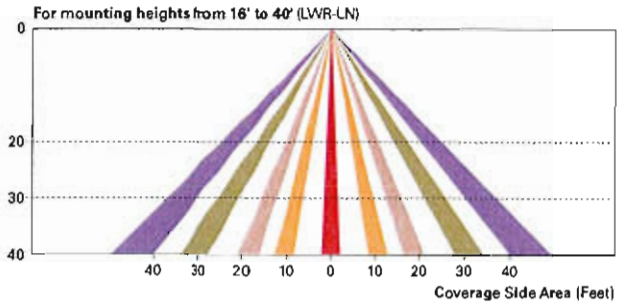






LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.





WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)
The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

LumenSafe Integrated Network Security Camera (LD)
Eaton brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

ORDERING INFORMATION

Sample Number: GLEON-AF-04-LED-E1-T3-GM-QM

Product Family [1, 2]	Light Engine	Number of Light Squares [3]	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	**AF**=1A Drive Current	**01**=1 **02**=2 **03**=3 **04**=4 **05**=5 [4] **06**=6 **07**=7 [5] **08**=8 [5] **09**=9 [6] **10**=10 [6]	**LED**=Solid State Light Emitting Diodes	**E1**=120-277V **347**=347V [7] **480**=480V [7, 8]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **5NQ**=Type V Narrow **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	**AP**=Grey **B2**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White	**[Blank]**=Arm for Round or Square Pole **EA**=Extended Arm [9] **MA**=Mast Arm Adapter [10] **WM**=Wall Mount **QM**=Quick Mount Arm (Standard Length) [11] **QMEA**=Quick Mount Arm (Extended Length) [12]

Options (Add as Suffix)	Accessories (Order Separately)
7030=70 CRI 3000K [13] **8030**=80 CRI 3000K [14] **7050**=70 CRI 5000K [13] **7060**=70 CRI 6000K [13] **600**=Drive Current Factory Set to Nominal 600mA [15] **800**=Drive Current Factory Set to Nominal 800mA [15] **1200**=Drive Current Factory Set to Nominal 1200mA [15, 16] **F**=Single Fuse (120, 277 or 347V. Must Specify Voltage) **FF**=Double Fuse (208, 240 or 480V. Must Specify Voltage) **2L**=Two Circuits [13, 18] **DIM**=External 0-10V Dimming Leads [19, 20] **P**=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Volatage) [21] **PER7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [21] **R**=NEMA Twistlock Photocontrol Receptacle [21] **AHD145**=After Hours Dim, 5 Hours [22] **AHD245**=After Hours Dim, 6 Hours [22] **AHD255**=After Hours Dim, 7 Hours [22] **AHD365**=After Hours Dim, 8 Hours [22] **HA**=50°C High Ambient [23] **MS/DIM-L08**=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height [24, 25] **MS/DIM-L20**=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height [24, 26] **MS/DIM-L40**=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height [24, 27] **MS/DIM-L40W**=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range) [24, 28] **MS/X-L08**=Bi-Level Motion Sensor, Maximum 8' Mounting Height [24, 25, 29] **MS/X-L20**=Bi-Level Motion Sensor, 9' - 20' Mounting Height [24, 26, 29] **MS/X-L40**=Bi-Level Motion Sensor, 21' - 40' Mounting Height [22, 23, 29] **MS/X-L40W**=Bi-Level Motion Sensor, 21' - 40' Mounting Height (Wide Range) [24, 28, 29] **MS-L08**=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height [24, 25] **MS-L20**=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height [24, 26] **MS-L40**=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height [24, 27] **MS-L40W**=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height (Wide Range) [24, 28] **LWR-LW**=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [30, (A)] **LWR-LN**=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [30, (A)] **WOLC-7P-10A**=WaveLinx Wireless Outdoor Lighting Control Module [(B)] **L90**=Optics Rotated 90° Left **R90**=Optics Rotated 90° Right **MT**=Factory Installed Mesh Top **TH**=Tool-less Door Hardware **LCF**=Light Square Trim Plate Painted to Match Housing [31] **HSS**=Factory Installed House Side Shield [32] **CE**=CE Merking [33]	**OA/RA1016**=NEMA Photocontrol Multi-Tap - 105-285V **OA/RA1027**=NEMA Photocontrol - 480V **OA/RA1201**=NEMA Photocontrol - 347V **OA/RA1013**=Photocontrol Shorting Cap **OA/RA1014**=120V Photocontrol **MA1252**=10kV Surge Module Replacement **MA1036-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1037-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1197-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1188-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1189-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**=3@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=2@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1038-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1039-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**=3@90° Tenon Adapter for 3-1/2" O.D. Tenon **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [24] **GLEON-MT1**=Field Installed Mesh Top for 1-4 Light Squares **GLEON-MT2**=Field Installed Mesh Top for 5-6 Light Squares **GLEON-MT3**=Field Installed Mesh Top for 7-8 Light Squares **GLEON-MT4**=Field Installed Mesh Top for 9-10 Light Squares **GLEON-QM**=Quick Mount Arm Kit [10] **GLEON-QMEA**=Quick Mount Extended Arm Kit [11] **LS/HSS**=Field Installed House Side Shield [32, 33] **WOLC-7P-10A**=WaveLinx Outdoor Control Module (7-pin) [35, (B)]

NOTES:
1 Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. **2** DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. **3** Standard 4000K CCT and minimum 70 CRI. **4** Not compatible with MS/4-LXX or MS/1-LXX sensors. **5** Not compatible with extended quick mount arm (QMEA). **6** Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA). **7** Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A. **8** Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). **9** May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table. **10** Factory installed. **11** Maximum 8 light squares. **12** Maximum 6 light squares. **13** Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. **14** Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. **15** 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. These files are published on the website. **16** Not available with HA option. **17** 2L is not available with MS, MS/X or MS/DIM at 347V or 480V. 2L in AF-02 through AF-04 requires a larger housing, normally used for AF-05 or AF-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. **18** Not available with LumaWatt Pro wireless sensors. **19** Cannot be used with other control options. **20** Low voltage control lead brought out 18" outside fixture. **21** Not available if any "MS" sensor is selected. Motion sensor has an integral photocell. **22** Requires the use of P photocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. **23** 50°C lumen maintenance data applies to 600mA, 800mA and 1A drive currents. **24** The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information. **25** Approximately 22' detection diameter at 8' mounting height. **26** Approximately 40' detection diameter at 20' mounting height. **27** Approximately 60' detection diameter at 40' mounting height. **28** Approximately 100' detection diameter at 40' mounting height. **29** Replace X with number of Light Squares operating in low output mode. **30** LumaWatt Pro wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1 and LWP-PoE8in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information. **31** Not available with house side shield (HSS). **32** Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected. **33** CE is not available with the LWR, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only. **34** One required for each Light Square. **35** Requires 7-pin NEMA twistlock photocontrol receptacle.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul	
L=LumenSafe Technology®	**D**=Dome Camera	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card **V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**R**=Cellular, Factory Installed Rogers SIM Card **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

*Consult LumenSafe system pages for additional details and compatibility. Not available with 9-10 light square housing. Not available with 347V, 480V or high ambient options.

McGraw-Edison

DESCRIPTION

The Impact Elite family of wall luminaires is the ideal complement to site design. Incorporating modular LightSquares technology, the Impact Elite luminaire provides outstanding uniformity and energy-conscious illumination. Combined with a rugged construction, the Impact Elite luminaire is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments and recreational facilities. UL/cUL listed for wet locations.

Catalog #	ISW-AF-450-LED-E1-SL4	Type
Project		WP1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two captive fasteners. Optional tamper-resistant Torx™ head fasteners offer vandal resistant access to the electrical chamber.

Optics
Choice of 10 patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K and 5700K CCT.

Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and are suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightSquares feature an IP66 enclosure rating and maintain greater than 90% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments and occupancy sensor available.

Mounting
Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" machanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish
Cast components finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.



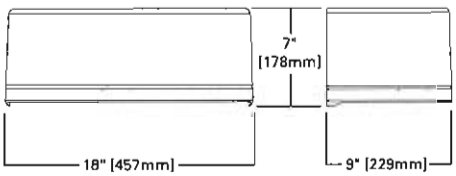

ISC/ISS/IST/ISW
IMPACT ELITE LED

1 LightSquare
Solid State LED

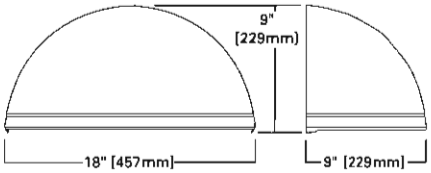
WALL MOUNT LUMINAIRE

DIMENSIONS

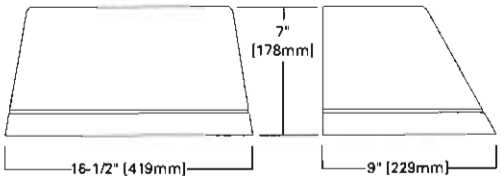
Cylinder



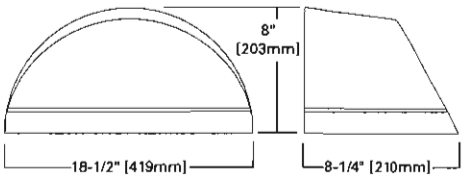
Quarter Sphere



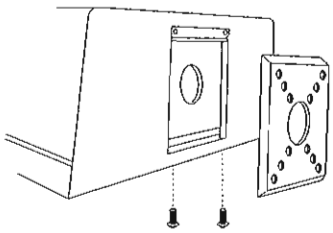
Trapezoid



Wedge



HOOK-N-LOCK MOUNTING



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightSquare
DesignLights Consortium® Qualified*
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA

Approximate Net Weight:
18 lbs. (8 kgs.)

*www.designlights.org

POWER AND LUMENS

1 LightSquare (AF)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120-277V	20.3	25.5	33.4	43.9	55.1	66.2	20.3	25.5	33.4	43.9	55.1	66.2
Current (A)	120V	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.05	0.06	0.08	0.11	0.13	0.16	0.06	0.06	0.08	0.11	0.13	0.16
Optics													
T2	Lumens	2,336	2,934	3,827	4,791	5,663	6,444	2,498	3,136	4,091	5,122	6,054	6,889
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
T3	Lumens	2,385	2,994	3,906	4,888	5,779	6,577	2,504	3,144	4,101	5,133	6,068	6,905
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
T4FT	Lumens	2,360	2,963	3,866	4,839	6,720	6,609	2,630	3,177	4,145	5,188	6,133	6,979
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
T4W	Lumens	2,386	2,996	3,908	4,892	5,783	6,581	2,500	3,139	4,095	5,126	6,059	6,895
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL2	Lumens	2,257	2,834	3,697	4,628	6,470	6,226	2,413	3,030	3,953	4,948	5,849	6,656
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL3	Lumens	2,220	2,787	3,636	4,552	5,380	6,122	2,365	2,970	3,874	4,849	5,732	6,523
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL4	Lumens	2,110	2,649	3,456	4,326	5,113	6,818	2,234	2,805	3,660	4,581	5,415	6,162
	BUG Rating	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SLL/SLR	Lumens	1,990	2,498	3,259	4,080	4,823	5,488	2,154	2,705	3,529	4,418	5,222	6,942
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
RW	Lumens	2,380	2,988	3,898	4,880	5,768	6,564	2,465	3,095	4,037	5,054	5,974	6,798
	BUG Rating	B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1

LUMEN MAINTENANCE

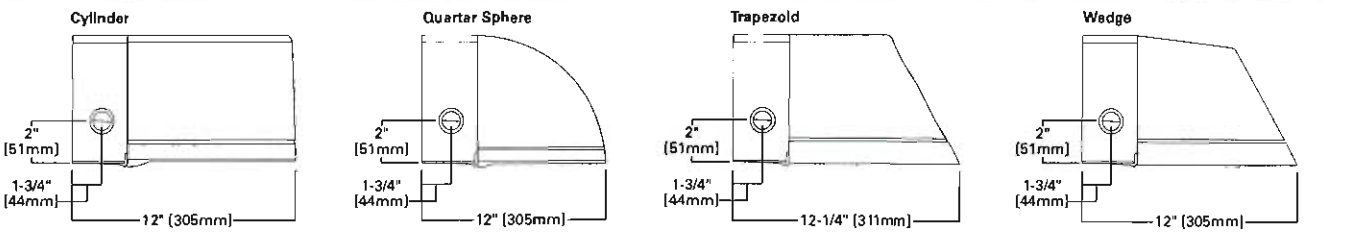
Current	Ambient Temperature	25000 Hours*	50000 Hours*	60000 Hours*	100000 Hours*	Theoretical L70 (Hours)*
Up to 1.2A	Up to 40°C	>85%	>91%	>90%	>83%	20,4000

*Data calculated based on TM-21 calculator.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10 C	1.02
15 C	1.01
25 C	1.00
40 C	0.99

THRUWAY BACK BOX



CONTROL OPTIONS

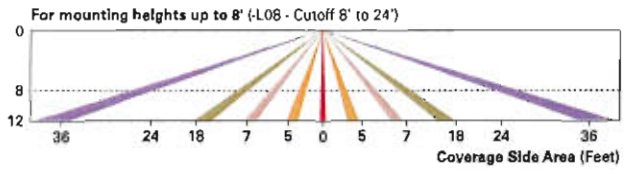
0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

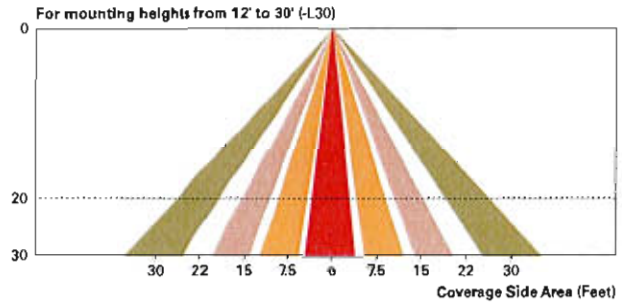
Photocontrol (PC1, PC2 and PER7)
Optional button-type photocontrol provides a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels.

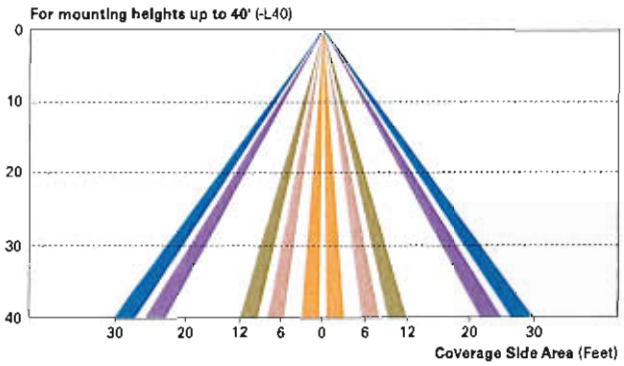
After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

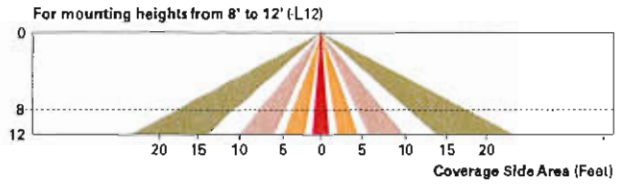
Dimming Occupancy Sensor (MS/DIM-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a tima delay of five minutes.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting -- the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other perameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.

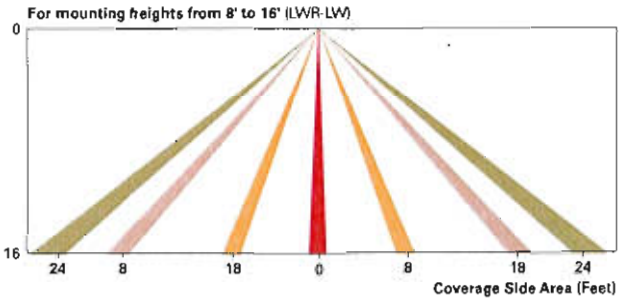


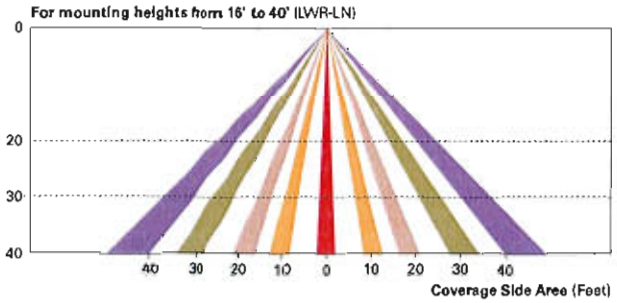






LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.





ORDERING INFORMATION

Sample Number: ISC-AF-1200-LED-E1-T3-BZ

Product Family [1]	Light Engine	Drive Current	Lamp Type	Voltage	Distribution	Color
ISC=Impact Elite LED Small Cylinder **ISS**=Impact Elite LED Small Quarter Sphere **IST**=Impact Elite LED Small Trapezoid **ISW**=Impact Elite LED Small Wedge	**AF**=(1) LightSquare	**350**=Drive Current Factory Set to 350mA **450**=Drive Current Factory Set to 450mA **600**=Drive Current Factory Set to 600mA **800**=Drive Current Factory Set to 800mA **1000**=Drive Current Factory Set to 1000mA **1200**=Drive Current Factory Set to 1200mA [2]	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V [2] **480**=480V [2, 3]	**T2**=Type II **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I	AP=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Accessories (Order Separately) [17]
7030=70 CRI / 3000K CCT [4] **7050**=70 CRI / 5000K CCT [4] **7060**=70 CRI / 5700K CCT [4] **8030**=80 CRI / 3000K CCT [4] **PER7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [2, 5, 6] **P**=Button Type Photocontrol (Available in 120, 208, 240 or 277V. Must Specify Voltage) [2, 6] **HA**=50°C High Ambient [7] **AHD145**=After Hours Dim, 5 Hours, 50% [8] **AHD245**=After Hours Dim, 6 Hours, 50% [8] **AHD255**=After Hours Dim, 7 Hours, 50% [8] **AHD355**=After Houre Dim, 8 Hours, 50% [8] **MS/DIM-LXX**=Motion Sensor for Dimming Operation [9, 10, 11] **LWR-LW**=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 15' Mounting Height [6, 11, 12] **LWR-LN**=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [6, 11, 12] **BBB**=Battery Pack with Back Box (Specify 120V or 277V) [13] **CWB**=Cold Weather Battery Pack with Back Box (Specify 120V or 277V) [14] **LCF**=LightSquare Trim Plate Matches Housing Finish **HSS**=Factory Installed House Side Shield [15] **ULG**=Uplight Glow [2, 6] **TR**=Tamper Resistant Hardware **X**=Driver Surge Protection (6kV) Only [16]	**MA1253**=10kV Circuit Module Replacement **MA1254-XX**=Thruway Back Box - Impact Elite Trapezoid **MA1255-XX**=Thruway Back Box - Impact Elite Cylinder **MA1256-XX**=Thruway Back Box - Impact Elite Quarter Sphere **MA1257-XX**=Thruway Back Box - Impact Elite Wedge **FSIR-100**=Wireless Configuretion Tool for Occupancy Sensor

NOTES:

1. Standard 4000K CCT and greater than 70 CRI.
2. Not available with ULG option.
3. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
4. Exentended lead times apply.
5. Not available with ISS or ISW.
6. Not available with LWR-XX or MS/DIM-LXX.
7. Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1.A or less.
8. Requires the use of P photocontrol or the PER7 photocontrol receptacle with photocontrol accessory. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information.
9. Specify lens in place of XX. Round to next highest option based on mounting height. Available options are 08, 20 and 40W.
10. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
11. Includes integral photocell.
12. LumaWatt Pro wireless sensors are factory installed and requiring network components in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information.
13. LED standard integral battery pack is rated for minimum operating temperature 32°F (0°C). Operates downlight for 90-minutes.
14. LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates downlight for 90-minutes.
15. Only for use with SL2, SL3 and SL4 distributions. The LightSquare trim plate is painted black when the HSS option is selected.
16. Removes additional surge module.
17. Specify color in place of XX.

McGraw-Edison

DESCRIPTION

The Impact Elite family of wall luminaires is the ideal complement to site design. Incorporating modular LightSquares technology, the Impact Elite luminaire provides outstanding uniformity and energy-conscious illumination. Combined with a rugged construction, the Impact Elite luminaire is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments and recreational facilities. UL/cUL listed for wet locations.

Catalog #	ISW-AF-450-LED-E1-SL3	Type
Project		WP2
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two captive fasteners. Optional tamper-resistant Torx™ head fasteners offer vandal resistant access to the electrical chamber.

Optics
Choice of 10 patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K and 5700K CCT.

Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and are suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightSquares feature an IP66 enclosure rating and maintain greater than 90% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments and occupancy sensor available.

Mounting
Gasketed and zinc pleted rigid steel mounting ettachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

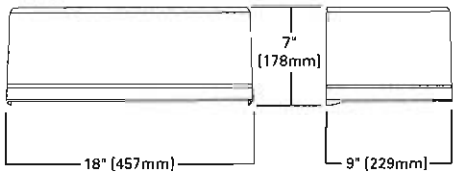
Finish
Cast components finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.

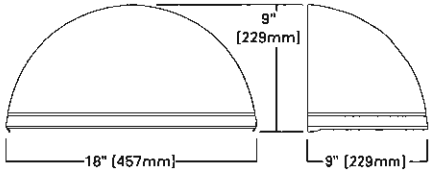



DIMENSIONS

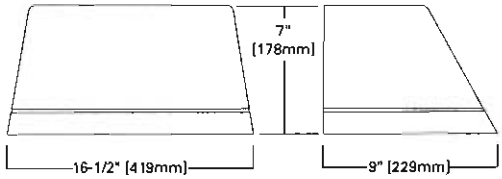
Cylinder



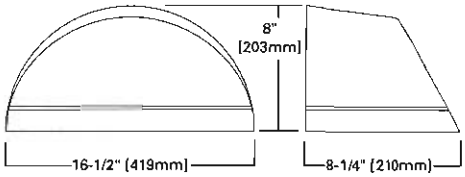
Quarter Sphere



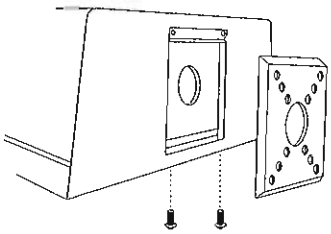
Trapezoid



Wedge



HOOK-N-LOCK MOUNTING



ISC/ISS/IST/ISW
IMPACT ELITE LED

1 LightSquare
Solid State LED

WALL MOUNT LUMINAIRE

CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightSquare
DesignLights Consortium® Qualified*
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA

Approximate Net Weight:
18 lbs. (8 kgs.)

*www.designlights.org

POWER AND LUMENS

1 LightSquare (AF)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120-277V	20.3	25.5	33.4	43.9	55.1	66.2	20.3	25.5	33.4	43.9	55.1	66.2
Current (A)	120V	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.16	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.06	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics													
T2	Lumens	2,336	2,934	3,827	4,791	6,663	6,444	2,498	3,136	4,091	5,122	6,054	6,889
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
T3	Lumens	2,385	2,994	3,906	4,889	5,779	6,577	2,504	3,144	4,101	5,133	6,068	6,905
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
T4FT	Lumens	2,360	2,963	3,866	4,839	6,720	6,609	2,630	3,177	4,145	6,188	6,133	6,979
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
T4W	Lumens	2,386	2,996	3,908	4,892	5,783	6,581	2,500	3,139	4,095	5,126	6,059	6,895
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL2	Lumens	2,257	2,834	3,697	4,828	6,470	6,225	2,413	3,030	3,953	4,948	5,849	6,666
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL3	Lumens	2,220	2,787	3,636	4,552	5,380	6,122	2,365	2,970	3,874	4,849	5,732	6,523
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL4	Lumens	2,110	2,649	3,456	4,326	5,113	5,818	2,234	2,805	3,660	4,581	5,415	6,162
	BUG Rating	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SLL/SLR	Lumens	1,990	2,498	3,259	4,080	4,823	5,488	2,164	2,705	3,529	4,418	5,222	5,942
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
RW	Lumens	2,380	2,988	3,898	4,880	5,768	6,564	2,465	3,095	4,037	6,054	5,974	6,798
	BUG Rating	B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1

LUMEN MAINTENANCE

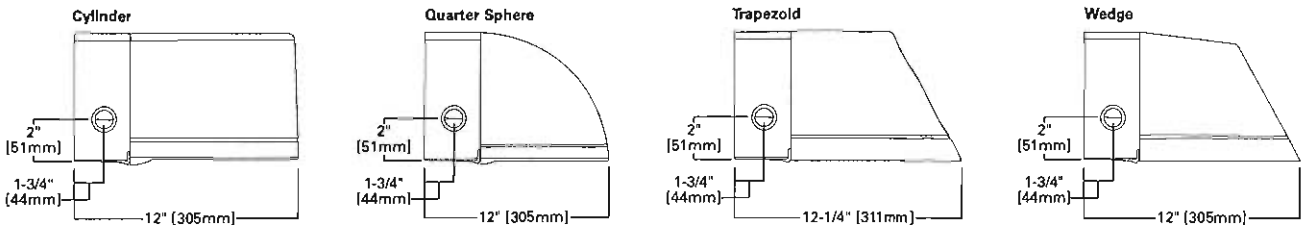
Current	Ambient Temperature	25000 Hours*	50000 Hours*	60000 Hours*	100000 Hours*	Theoretical L70 (Hours)*
Up to 1.2A	Up to 40°C	>95%	>91%	>90%	>83%	20,4000

*Data calculated based on TM-21 calculator.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10 C	1.02
15 C	1.01
25 C	1.00
40 C	0.99

THRUWAY BACK BOX



CONTROL OPTIONS

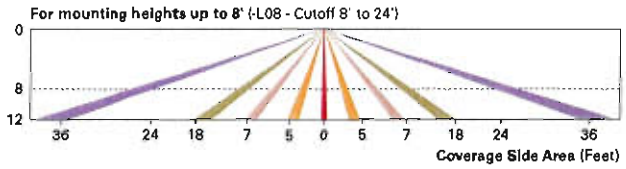
0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

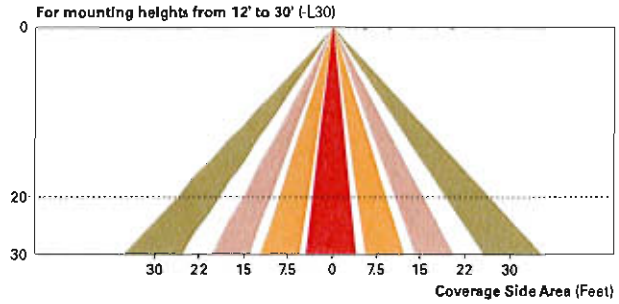
Photocontrol (PC1, PC2 and PER7)
Optional button-type photocontrol provides a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels.

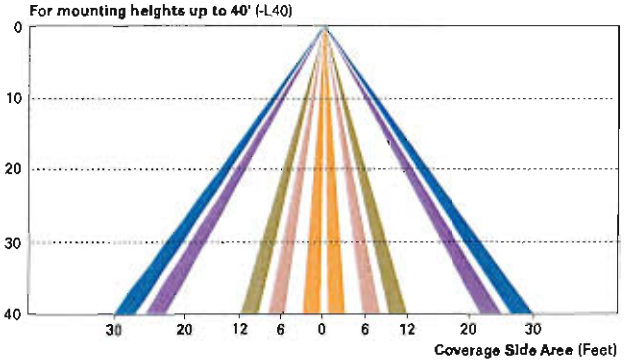
After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for e simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

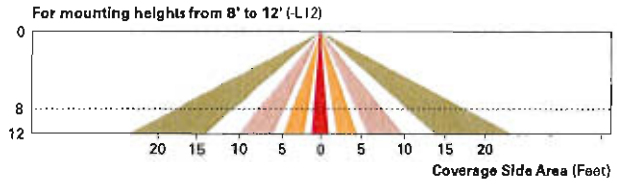
Dimming Occupancy Sensor (MS/DIM-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting -- the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.

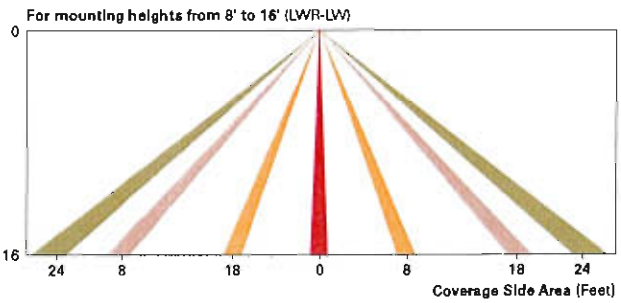


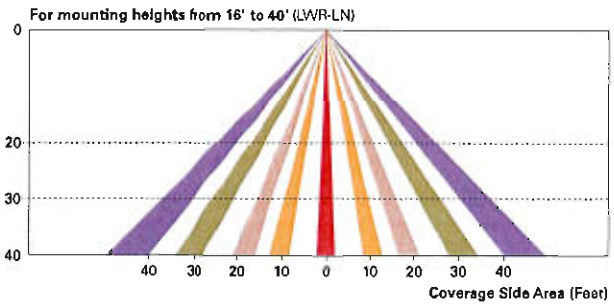






LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.





ORDERING INFORMATION

Sample Number: ISC-AF-1200-LED-E1-T3-BZ

Product Family [1]	Light Engine	Drive Current	Lamp Type	Voltage	Distribution	Color
ISC=Impact Elite LED Small Cylinder **ISS**=Impact Elite LED Small Quarter Sphere **IST**=Impact Elite LED Small Trapezoid **ISW**=Impact Elite LED Small Wedge	**AF**=(1) LightSquare	**350**=Drive Current Factory Set to 350mA **450**=Drive Current Factory Set to 450mA **600**=Drive Current Factory Set to 600mA **800**=Drive Current Factory Set to 800mA **1000**=Drive Current Factory Set to 1000mA **1200**=Drive Current Factory Set to 1200mA [2]	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V [2] **480**=480V [2,3]	**T2**=Type II **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I	AP=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Accessories (Order Separately) [17]
7030=70 CRI / 3000K CCT [4] **7050**=70 CRI / 5000K CCT [4] **7060**=70 CRI / 5700K CCT [4] **8030**=80 CRI / 3000K CCT [4] **PER7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [2,5,6] **P**=Button Type Photocontrol (Available in 120, 208, 240 or 277V. Must Specify Voltage) [2,6] **HA**=50°C High Ambient [7] **AHD145**=After Hours Dim, 5 Hours, 50% [8] **AHDZ45**=After Hours Dim, 6 Hours, 50% [8] **AHD255**=After Hours Dim, 7 Hours, 50% [8] **AHD365**=After Hours Dim, 8 Hours, 50% [8] **MS/DIM-LXX**=Motion Sensor for Dimming Operation [9,10,11] **LWR-LW**=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [8,11,12] **LWR-LN**=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [8,11,12] **BBB**=Battery Pack with Back Box (Specify 120V or 277V) [13] **CWB**=Cold Weather Battery Pack with Back Box (Specify 120V or 277V) [14] **LCF**=LightSquare Trim Plate Matches Housing Finish **HSS**=Factory Installed House Side Shield [15] **ULG**=Uplight Glow [8,9] **TR**=Tamper Resistant Hardware **X**=Driver Surge Protection (6kV) Only [16]	**MA1253**=10kV Circuit Module Replacement **MA1254-XX**=Thruway Back Box - Impact Elite Trapezoid **MA1255-XX**=Thruway Back Box - Impact Elite Cylinder **MA1256-XX**=Thruway Back Box - Impact Elite Quarter Sphere **MA1257-XX**=Thruway Back Box - Impact Elite Wedge **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor

NOTES:

1. Standard 4000K CCT and greater than 70 CRI.
2. Not available with ULG option.
3. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
4. Exentended lead times apply.
5. Not available with ISS or ISW.
6. Not available with LWR-XX or MS/DIM-LXX.
7. Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1.A or less.
8. Requires the use of P photocontrol or the PER7 photocontrol receptacle with photocontrol accessory. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information.
9. Specify lens in place of XX. Round to next highest option based on mounting height. Available options are 08, 20 and 40W.
10. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
11. Includes integral photocell.
12. LumaWatt Pro wireless sensors are factory installed and requiring network components in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information.
13. LED standard integral battery pack is rated for minimum operating temperature 32°F (0°C). Operates downlight for 90-minutes.
14. LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates downlight for 90-minutes.
15. Only for use with SL2, SL3 and SL4 distributions. The LightSquare trim plate is painted black when the HSS option is selected.
16. Removes additional surge module.
17. Specify color in place of XX.

MIN. REQ. 1,500 SQ.FT.
ACTUAL 4,914 SQ.FT.

MIN. REQ.600 SQ.FT.
ACTUAL 1,252 SQ.FT.

208'-2 3/4"

166'-5 5/8"

41'-9 1/8"

30'-0"

104'-0"

40'-0"

6' HIGH FENCE

5' HIGH FENCE

4' HIGH FENCE

ALARMED PANIC DEVICE GATE

4' GATE

5' SIDEWALK

34'x24'x10' HIP SHADE w/ GLIDE ELBOWS

TURF

SOD

HARD SURFACE 483 SQ.FT.

5'x5' POLYTUNE GAZEBO w/ SNOW STOVE COVER

HARD SURFACE 25 SQ.FT.

SOFT SURFACE 196 SQ.FT.

10'x10' SINGLE COLUMN SHADE

DUMPSTER

PARKING LOT

SOCCER FIELD
3,4210 SQ.FT.

AREA #11
MULTI-PURPOSE
877 ACTUAL SQ.FT.

AREA #10
4/5 YEAR OLDS
20 CHILDREN
700 MIN. REQ. SQ.FT.
705 ACTUAL SQ.FT.
+5

AREA #9
4 YEAR OLDS
20 CHILDREN
700 MIN. REG. SQ.FT.
705 ACTUAL SQ.FT.
+5

AREA #8
2 YEAR OLDS
16 CHILDREN
560 MIN. REQ. SQ.FT.
565 ACTUAL SQ.FT.
+5

AREA #7
2 YEAR OLDS
(FUTURE TODDLER)
16 CHILDREN
560 MIN. REQ. SQ.FT.
565 ACTUAL SQ.FT.
+5

AREA #6
TODDLER
8 CHILDREN
360 MIN. REQ.
369 ACTUAL SQ.FT.
+9

AREA #5
TODDLER
8 CHILDREN
360 MIN. REQ.
369 ACTUAL SQ.FT.
+9

AREA #4
TODDLER
(FUTURE INFANT)
8 CHILDREN
360 MIN. REQ. SQ.FT.
365 ACTUAL SQ.FT.
+5

LOUNGE

AREA #12
4 YEAR OLDS
20 CHILDREN
700 MIN. REQ. SQ.FT.
708 ACTUAL SQ.FT.
+8

AREA #13
3 YEAR OLDS
20 CHILDREN
700 MIN. REQ. SQ.FT.
705 ACTUAL SQ.FT.
+5

LOBBY

DIRECTOR'S OFFICE

VESTIBULE

F/S KITCHEN

PANTRY

WATER SOFTER TANK

ELEC. CLOSET

SPRINKLER ROOM

CON. ROOM

GENERAL STORAGE

COMMUNITY CABINET

AREA #1
INFANTS
8 CHILDREN
360 SQ.FT.
370 ACTUAL
+10

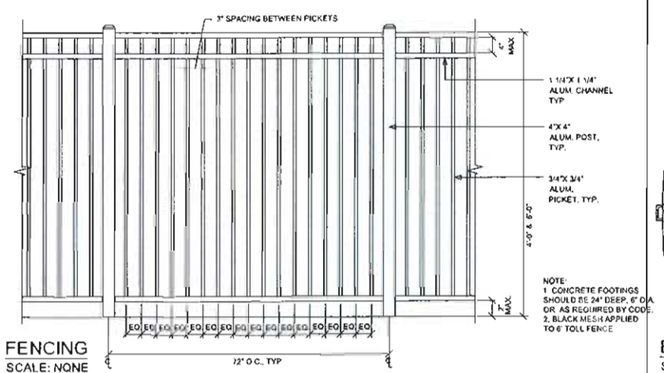
AREA #2
INFANTS
8 CHILDREN
360 SQ.FT.
370 ACTUAL
+10

AREA #3
INFANTS
8 CHILDREN
360 SQ.FT.
370 ACTUAL
+10

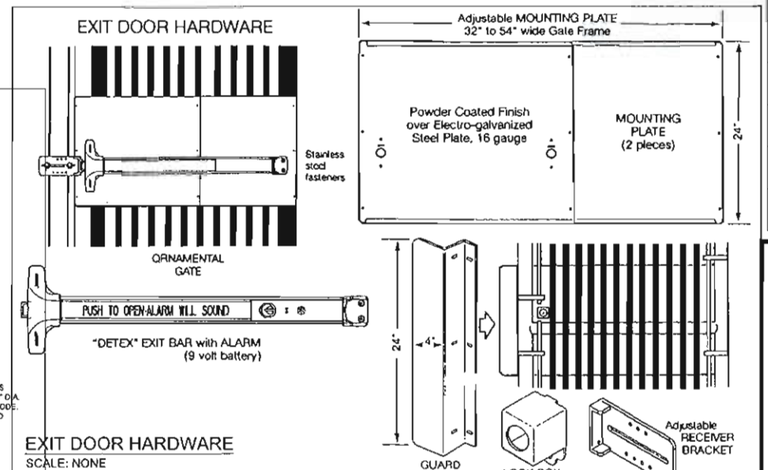
GATE

ALARMED PANIC DEVICE GATE

NOTE: NO UNDERGROUND UTILITIES IN THESES PLAY GROUND AREAS



FENCING
SCALE: NONE



EXIT DOOR HARDWARE
SCALE: NONE

PLAY AREA SQ.FT.				
PLAY AREAS	MIN. REQ. SQ.FT.	ACTUAL SQ.FT.	SOFT SURFACING	HARD SURFACING
INFANT TODDLER:	600	1,252	196	0
PRE-SCHOOL:	1,500	4,914	980	508
SOCCER FIELD:	0	3,410	0	0
TOTAL:	2,100	9,576	1,176	508

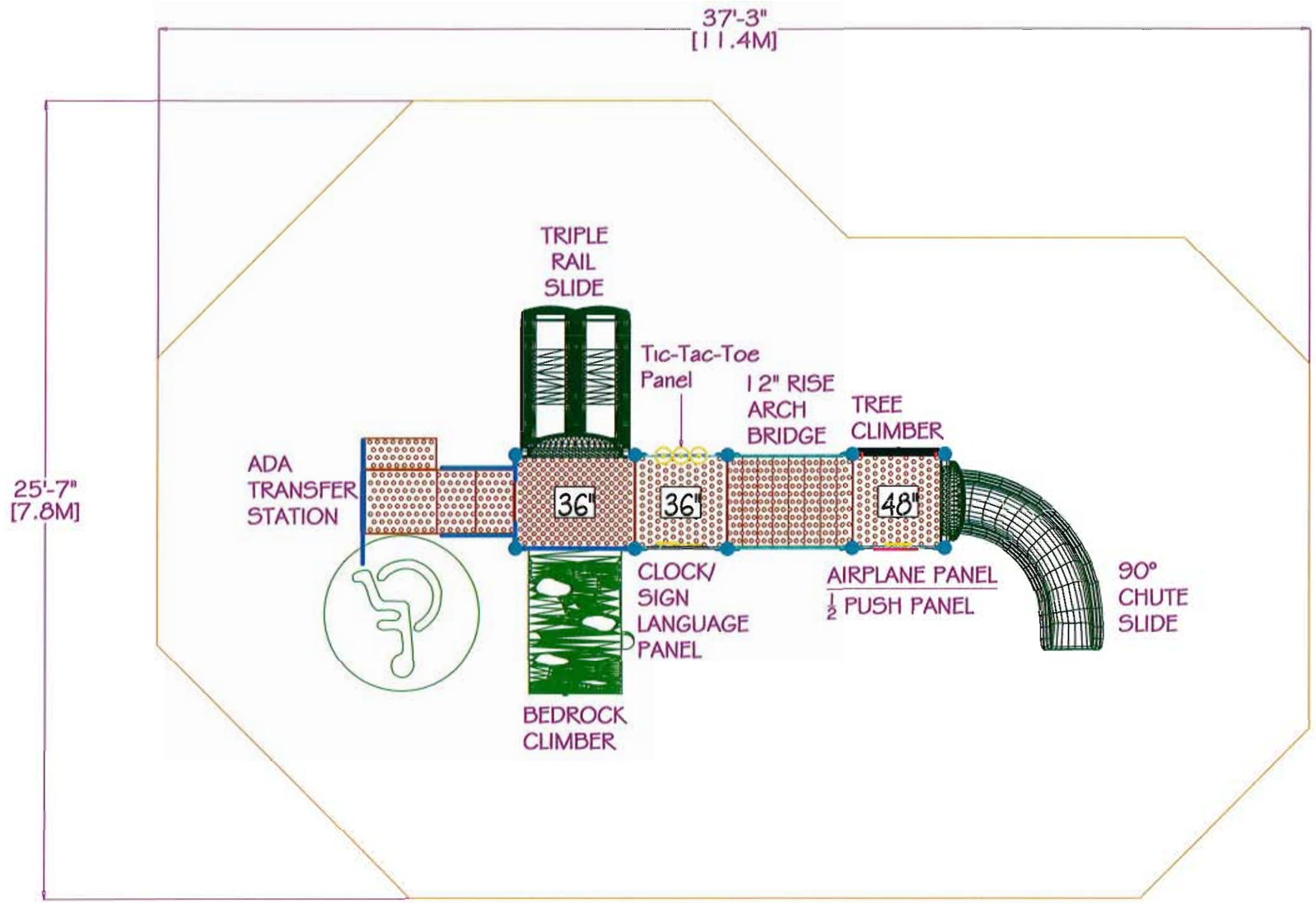
RECEIVED
DEC 26 2018
City of Chesterfield
Department of Public Services

NOT FOR CONSTRUCTION

KIDDIE ACADEMY®
EDUCATIONAL CHILD CARE
3415 BOX HILL CORPORATE CENTER DRIVE
ABINGDON, MD 21009

TITLE: PLAY PLAN	
FZE: KELLER	LOCATION: CHESTERFIELD, MO
DATE: 08-21-2018	DRAWN BY: SMD
SCALE: NTS (24X36)	CHECKED BY: CGC
FILE NO.: 559	SHEET NO.: 4 OF 13

S:\Academy\FA\Active\Keller (559)\RE_CONST\Sites\NEC Hilltown Village Center & Chesterfield Parkway W, Chesterfield\Plans\Concept Plan\Conceptual Floor Plan.dwg



Grounds For Play
A Division of SRP

REFERENCE NUMBER
GFP-2010-205-03-M2
3.5" STEEL STRUCTURE DESIGN

EQUIPMENT SIZE	USE ZONE
25'X14'	37'X26'

AGE GROUP	SURFACE AREA
2-5	787 S.F.

USER CAPACITY	4' TIMBER COUNT
13-18	29

FALL HEIGHT
4'

ADA ACCESSIBILITY

ELEVATED
PLAY ACTIVITIES
4

	GROUND LEVEL ACCESSIBLE PLAY ACTIVITIES	GROUND LEVEL ACCESSIBLE ACTIVITY TYPES
REQUIRED	1	1
PROVIDED	1	1

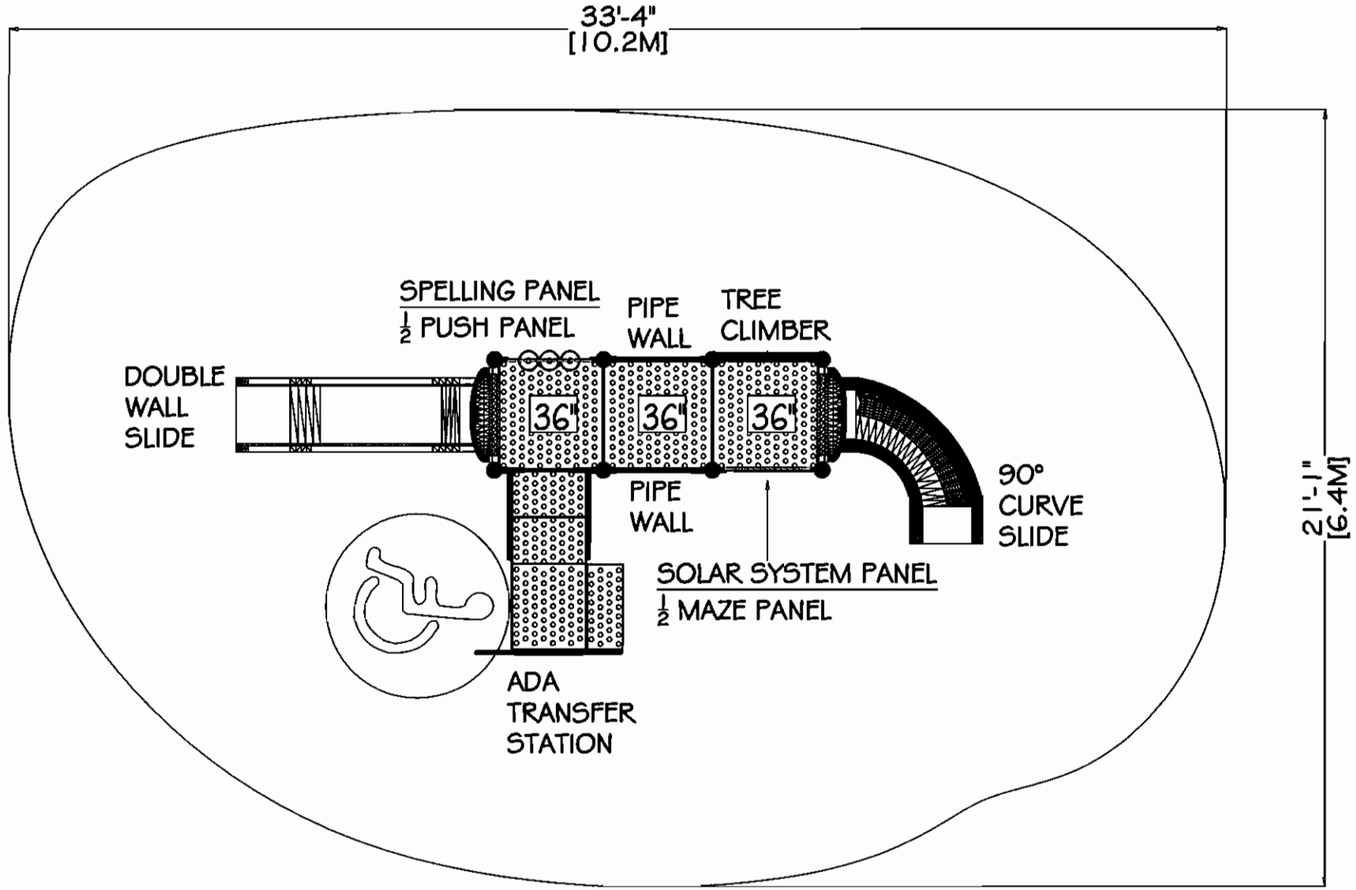
THIS STRUCTURE MEETS OR EXCEEDS CPSC #325 AND ASTM F1487-11 UNLESS OTHERWISE NOTE.

DATE	DRAWN/SAVED BY
3/22/17	CK / AWILSON
SCALE	SHEET
NTS	2 OF 2

PAGE
PLAN VIEW

WE RECOMMEND THIS PLAN BE PRINTED ON 11" x 17" PAPER.

PLAYGROUND SUPERVISION IS REQUIRED.



Grounds For Play
A Division of SRP

REFERENCE NUMBER
GFP-1758-205-03
3.5" STEEL STRUCTURE DESIGN

EQUIPMENT SIZE	USE ZONE
20'X8'	33'X21'
AGE GROUP	SURFACE AREA
2-5	571 S.F.

USER CAPACITY	4' TIMBER COUNT
12-17	24

FALL HEIGHT
3'

ADA ACCESSIBILITY

ELEVATED
PLAY ACTIVITIES
5

	GROUND LEVEL ACCESSIBLE PLAY ACTIVITIES	GROUND LEVEL ACCESSIBLE ACTIVITY TYPES
REQUIRED	2	2
PROVIDED	2	2

THIS STRUCTURE MEETS OR EXCEEDS CPSC #325 AND ASTM F1487-11 UNLESS OTHERWISE NOTE.

DATE	DRAWN/SAVED BY
3/27/17	CK / CKELLER
SCALE	SHEET
NTS	1 OF 1

PAGE
PLAN VIEW

WE RECOMMEND THIS PLAN BE PRINTED ON 11" x 17" PAPER

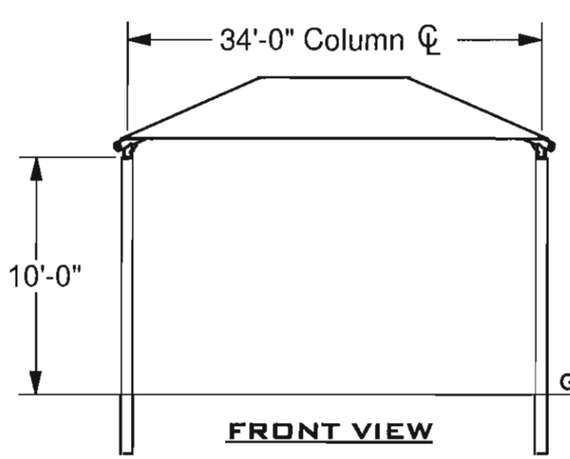
PLAYGROUND SUPERVISION IS REQUIRED.

RECTANGLE HIP SHADE

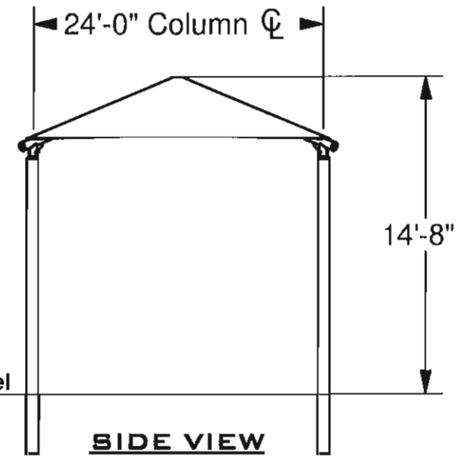
24’ x 34’ x 10’

MODEL #:
RD243410IG (With Glide Elbows)
RD243410IN (Without Glide Elbows)

REF.#	PART DESCRIPTION	QTY.
1	Ø6.6" Capped Embedded Column	4
2	Angled Elbow	4
3	Ø2.88" Hip Rafter w/ Swaged End	4
4	Ø2.88" Ridge Pole w/ Swaged Ends	1
5	Rectangle "Y" Connection	2
6	Fabric Cover w/ Cable Insert	1
7	Frame Hardware Kit	1

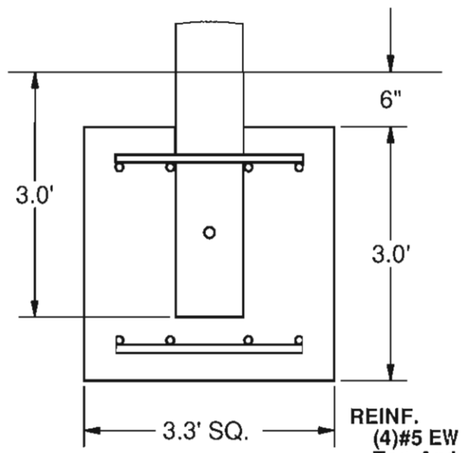


FRONT VIEW



SIDE VIEW

TRIMETRIC VIEW



FOOTING DETAIL

REINF.
(4)#5 EW
Top And Bottom

*Footing design based on 1500 PSF soil bearing pressure.

SUPERIOR
RECREATIONAL PRODUCTS

1050 Columbia Drive
Carrollton, Georgia
1.888.829.8997 | 770.834.2764 (f)

Playgrounds

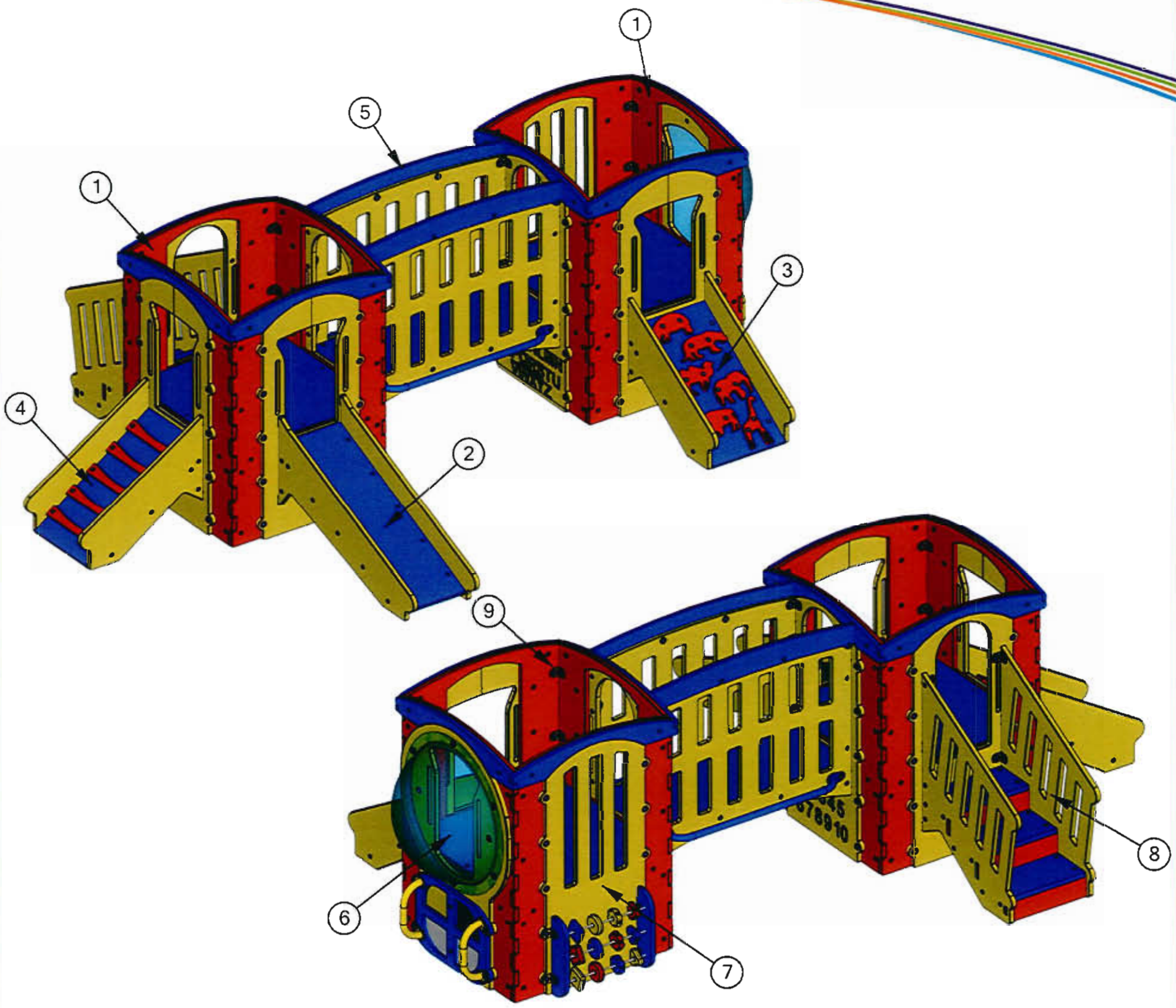
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Total Weight: 695 lbs (315.2 kg)

ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION
1	2	Base Tower	6	1	Bubble / Texture Module
2	1	Slide Module	7	1	Barrier / Bead Module
3	1	Animal Rung Module	8	1	Stair Module
4	1	Straight Rung Climber Module	9	1144	Assembly Hardware (Stainless Steel)
5	1	Alphabet Bridge Module			

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

Playgrounds

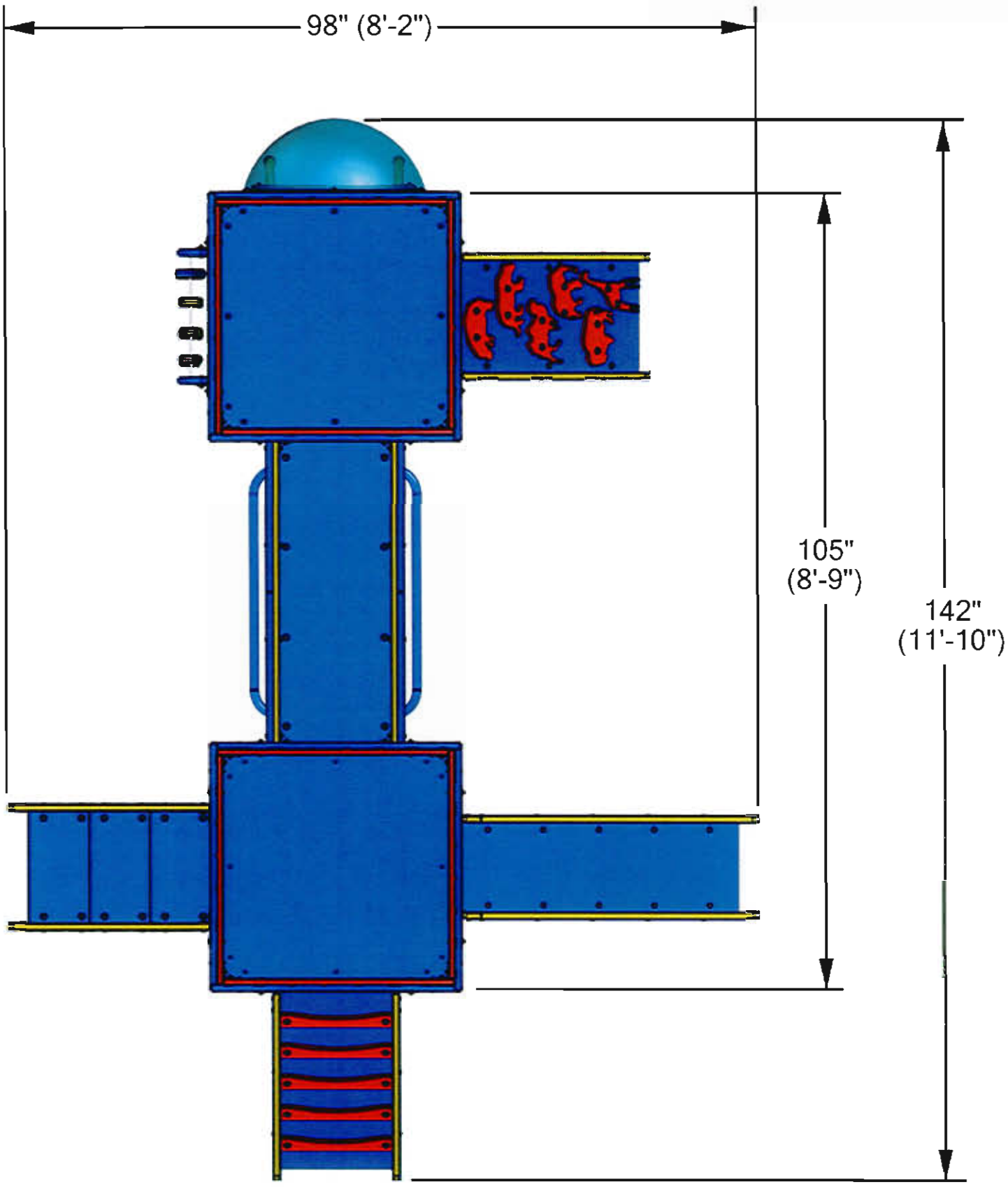
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Plan View

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

Playgrounds

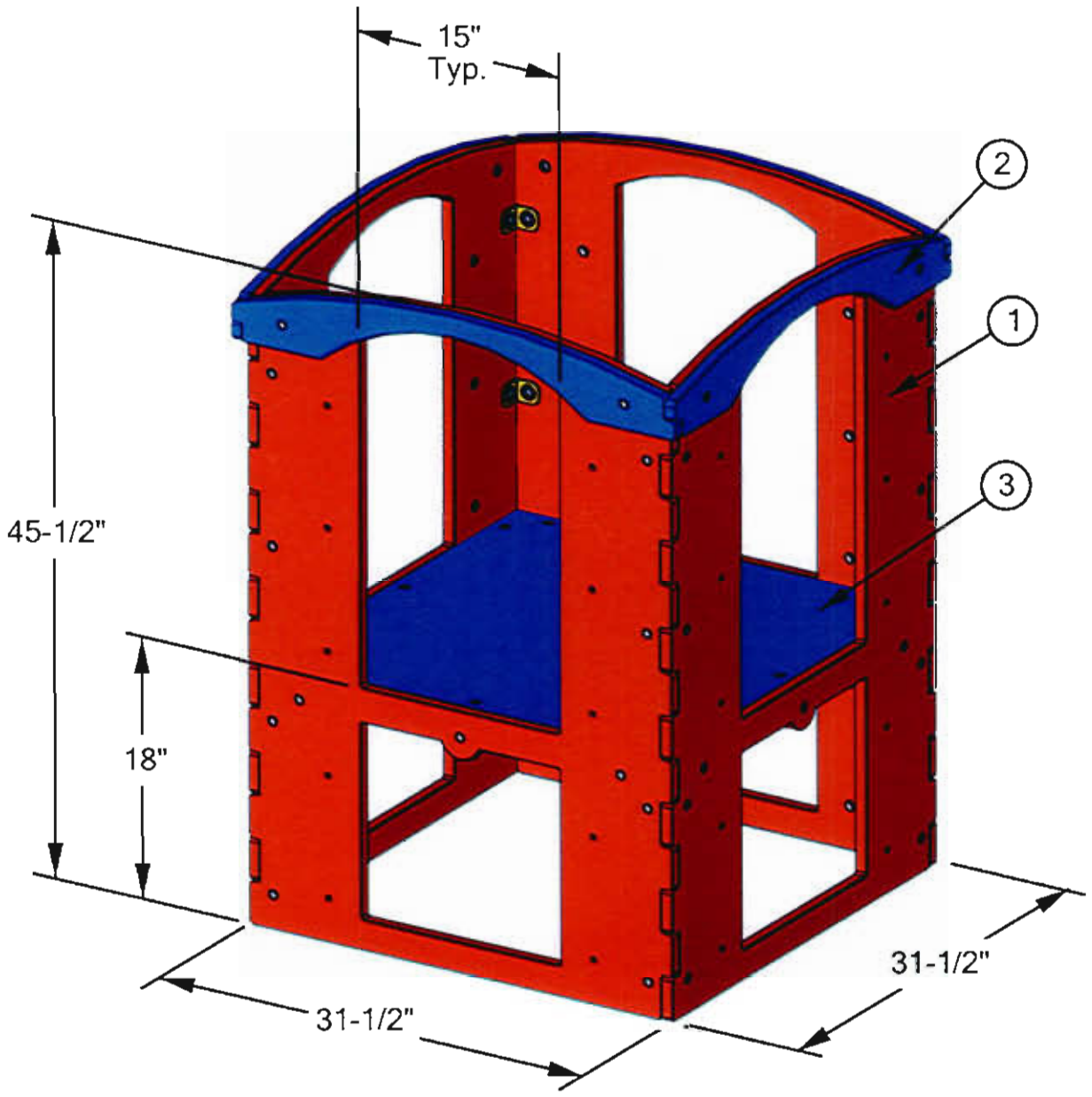
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Base Tower

ITEM	QTY	DESCRIPTION	MATERIAL
1	4	¾" Wall Panel	HDPE
2	4	¾" Trim Panel	HDPE
3	1	¾" Floor Panel	HDPE

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

Playgrounds

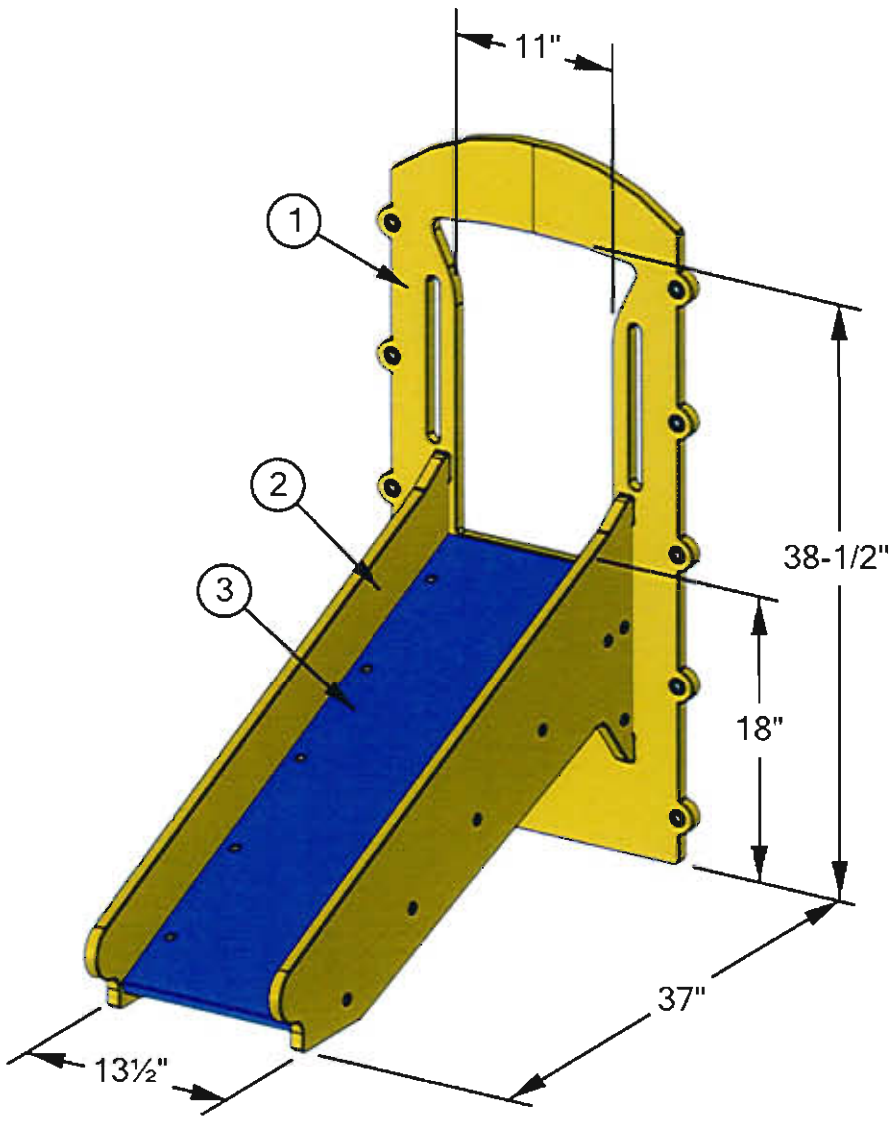
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Slide Module

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	¾" Main Panel	HDPE
2	2	¾" Side Panel	HDPE
3	1	¾" Slide Panel	HDPE

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

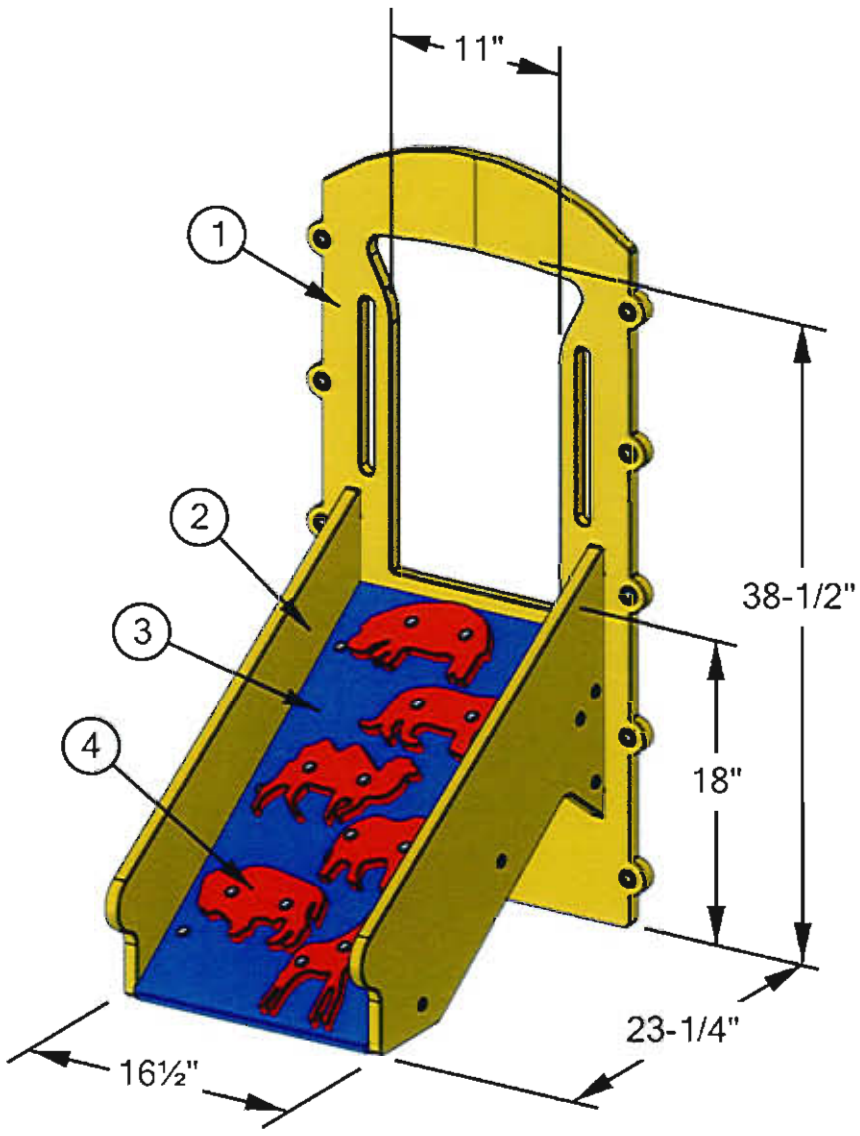
Playgrounds

BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons
Model: TFR0533XX

Age Group: 6-23 Months



Animal Rung Climber Module

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	¾" Main Panel	HDPE
2	2	¾" Side Panel	HDPE
3	1	¾" Slide Panel	HDPE
4	6	¾" Animal Shape	HDPE

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

Playgrounds

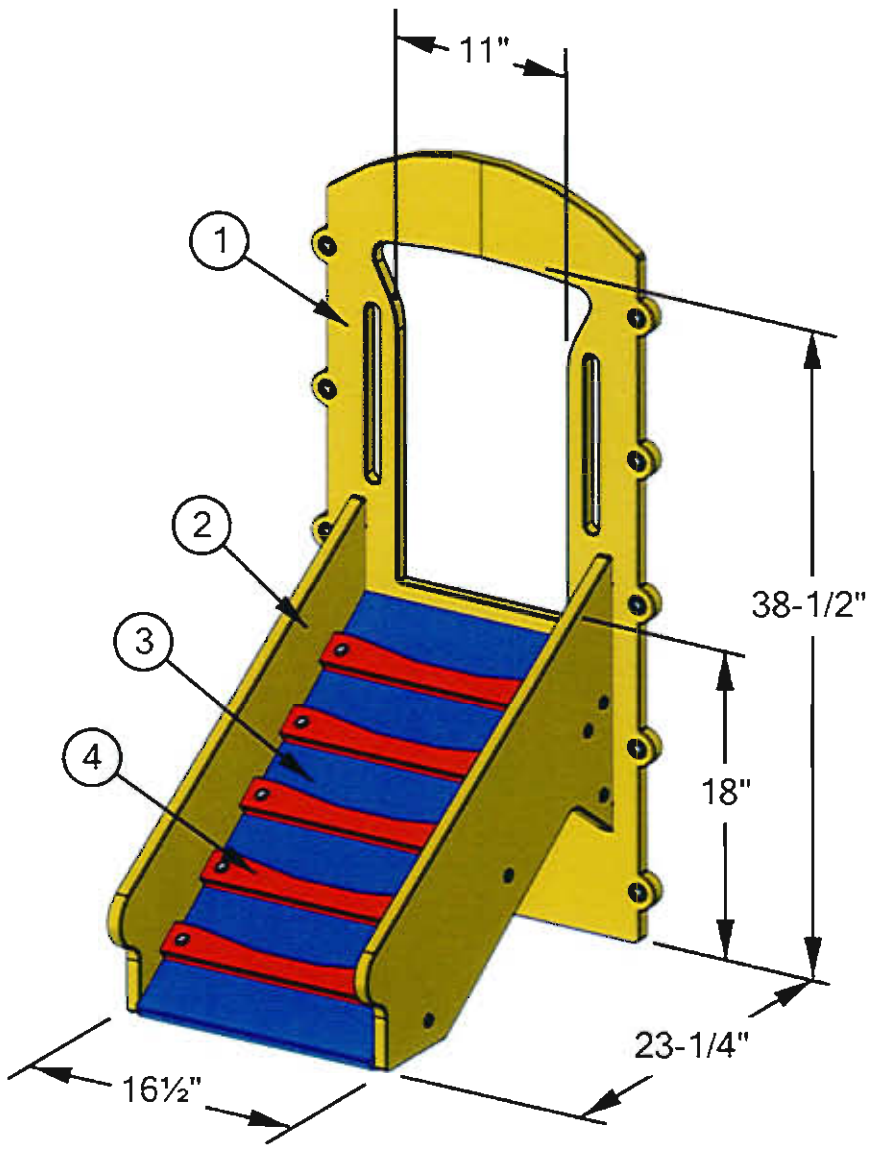
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Straight Rung Climber Module

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	¾"Main Panel	HDPE
2	2	¾" Side Panel	HDPE
3	1	¾" Slide Panel	HDPE
4	5	¾" Straight Rung Panel	HDPE

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

Playgrounds

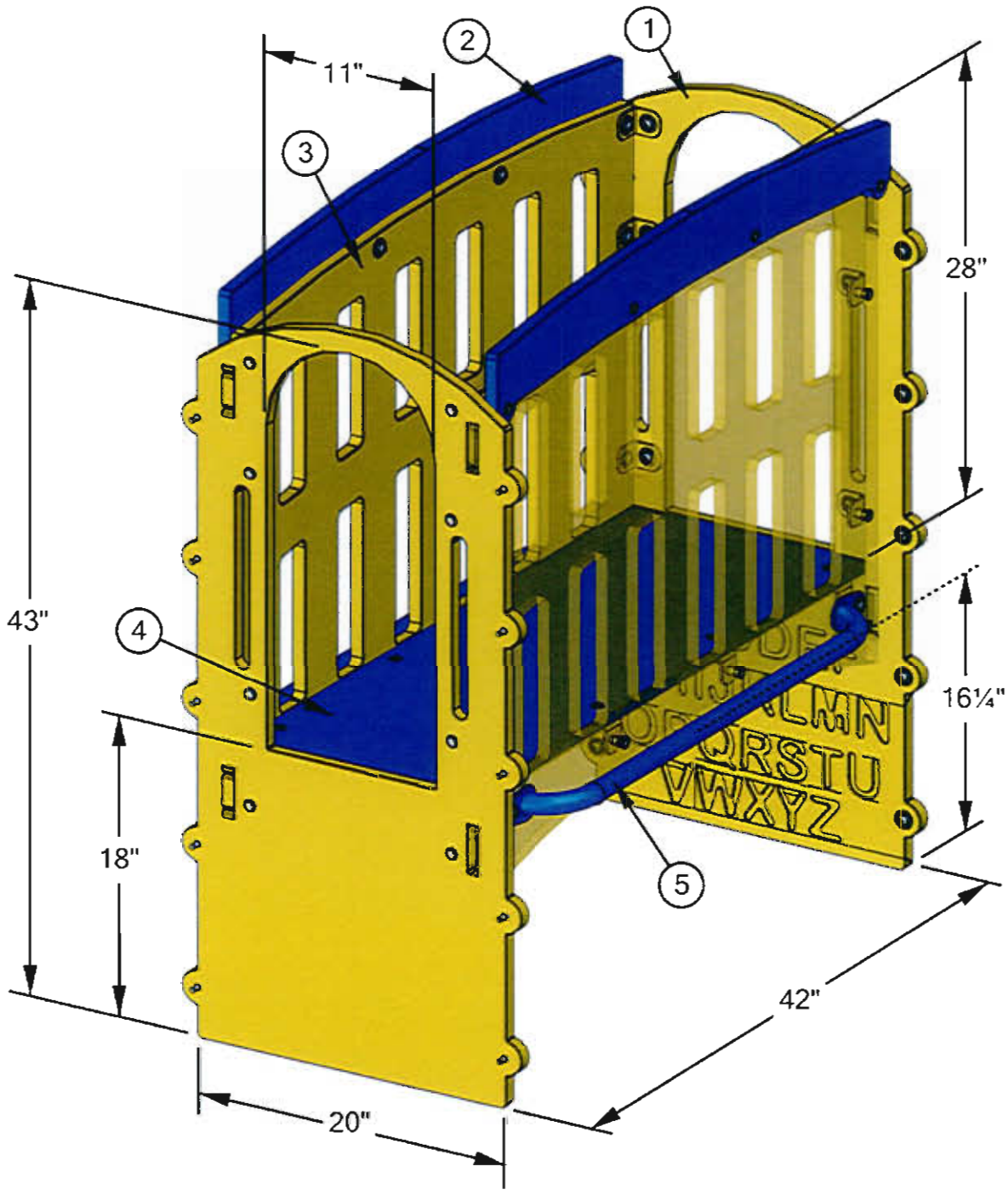
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Alphabet Bridge Module

ITEM	QTY	DESCRIPTION	MATERIAL
1	2	¾" End Panel	HPDE
2	2	¾" Top Trim Panel	HDPE
3	2	¾" Side Barrier Panel	HDPE
4	1	¾" Floor Panel	HDPE
5	2	Pull Up Bar	Powder Coated Steel

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

Playgrounds

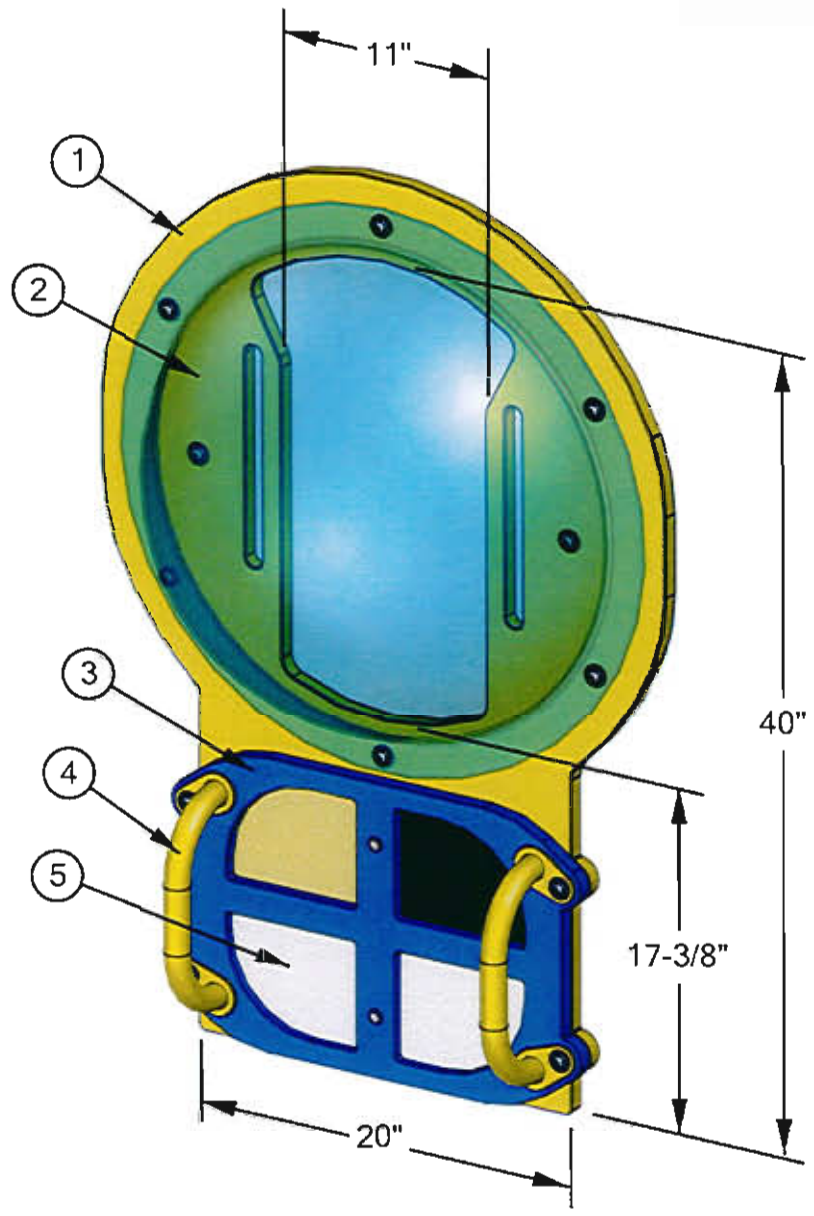
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Bubble / Texture Panel Module

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	¾" Main Panel	HDPE
2	1	Bubble Panel	Lexan
3	1	¾" Frame Panel	HDPE
4	2	Grab Handle	Powder Coated Steel
5	4	Texture Panel	Various

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

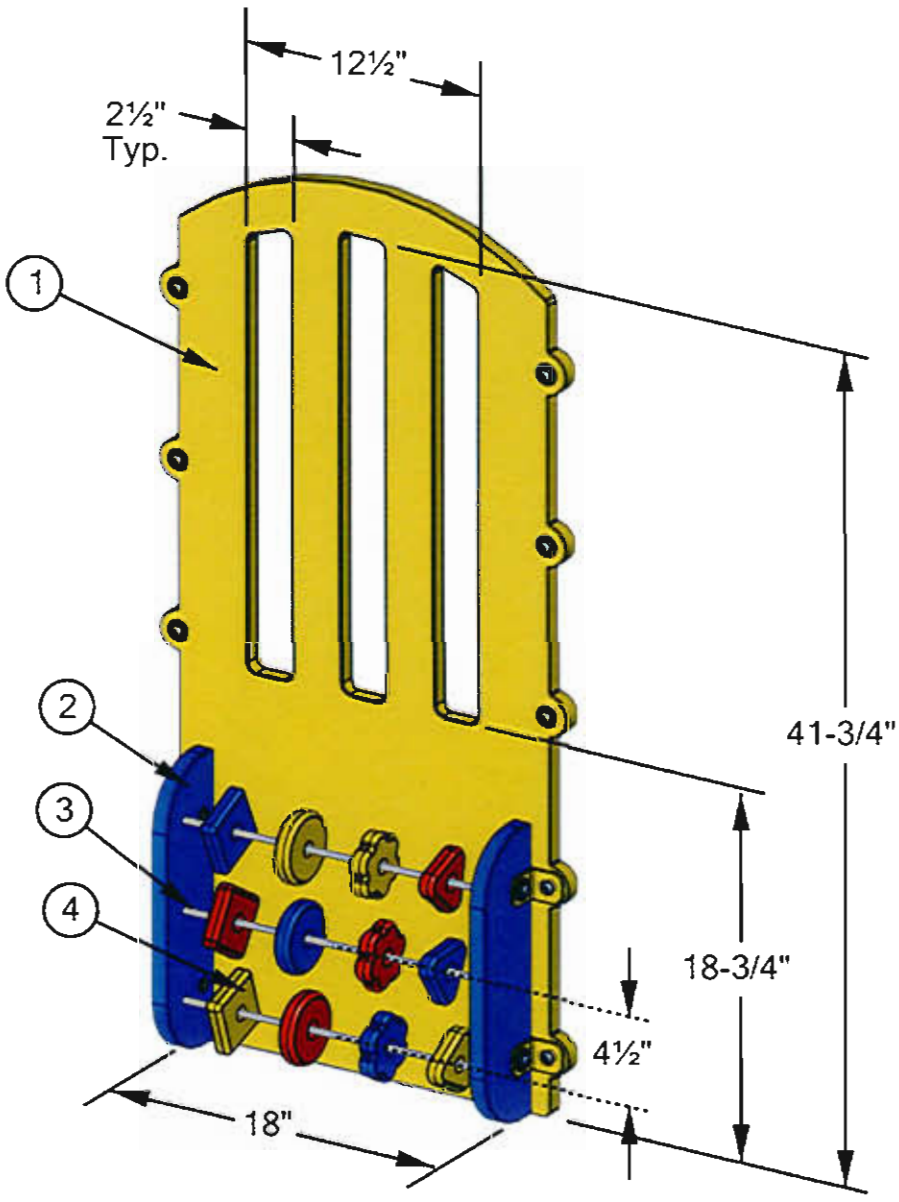
Playgrounds

BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons
Model: TFR0533XX

Age Group: 6-23 Months



Barrier / Bead Panel Module

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	¾" Main Panel	HDPE
2	2	¾" Side Panel	HDPE
3	3	Bead Rod	Stainless Steel
4	12	¾" Bead – Various Shapes	HDPE

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com

Playgrounds

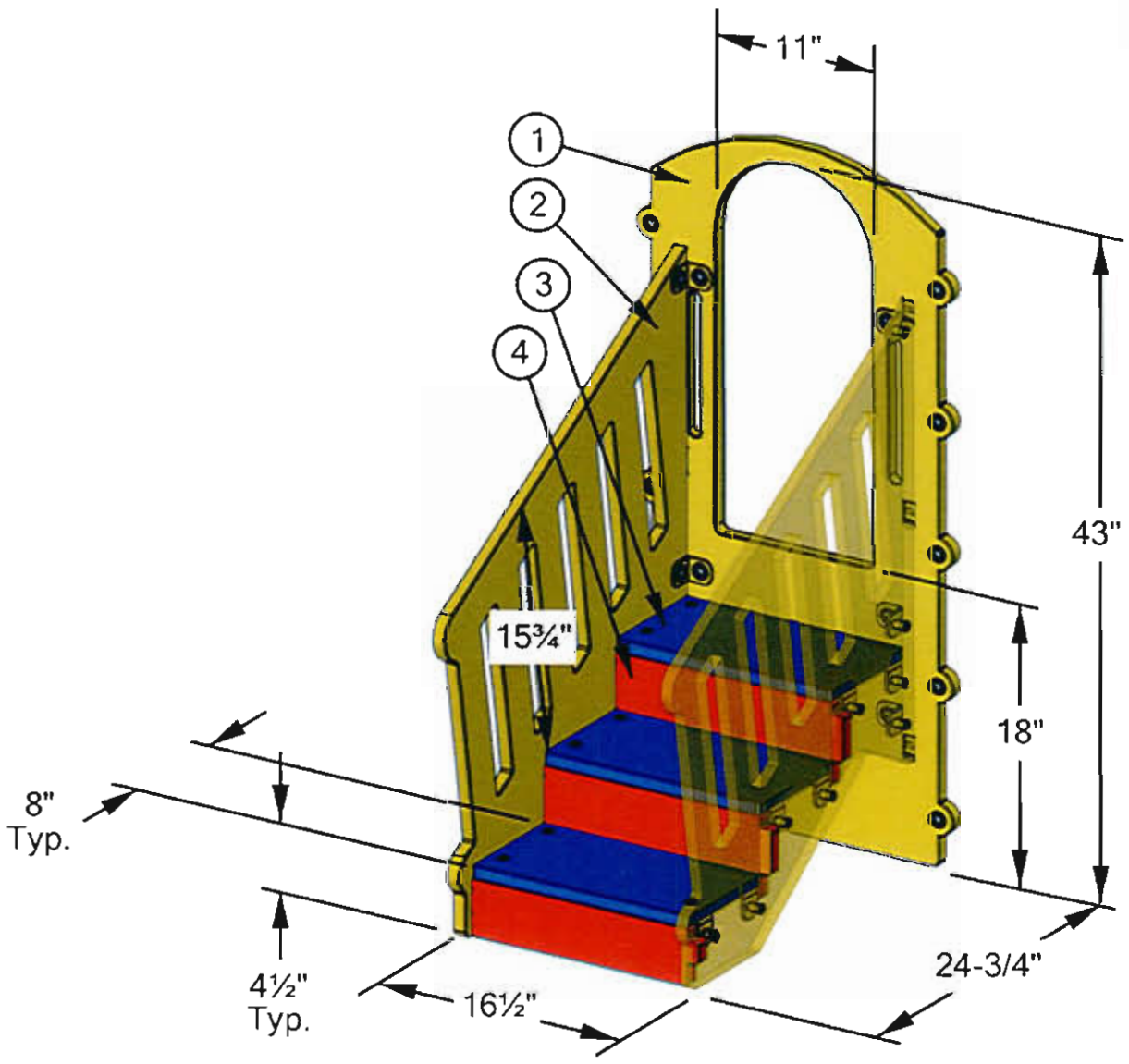
BY SUPERIOR RECREATIONAL PRODUCTS

SPECIFICATION SHEET

Tot-Trek Base and Starter Modules with Add-ons

Model: TFR0533XX

Age Group: 6-23 Months



Stair Module

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	¾" Main Panel	HDPE
2	2	¾" Barrier Panel	HDPE
3	3	¾" Step Panel	HDPE
4	3	¾" Kick Panel	HPDE

1050 Columbia Dr • Carrollton, GA 30117 • Phone: 855-519-4886 • Fax: 770-832-6687 • sales@siibrands.com