City of Wyandotte Michigan

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PARKING LOT

REQUIREMENTS

street side lot line than the existing front yard setback of the to the rear, provided the setback need not exceed ten (10) feet.

- L. Mechanical equipment installed outside of one or two family diwellings and their attached structures shall not be installed in any front and / or minimum required side yard and shall be located behind the dwelling and not closer than five (5) feet from the property line. Exception: 1) Where a side yard abuts a street or an alley, the Building Official may approve a side yard location on the street or alley side, if the locations is established prior to installation.
- M. An accessory building or use shall not include a wood burning device to supplement home heating.

2403 PARKING REQUIREMENTS

There shall be provided in all districts at the time of erection or enlargement of any main building or structure, automobile off-street parking with adequate access to all spaces. The number of off street parking spaces and improvements shall be in accordance with this Section, in conjunction with all land or building uses prior to the issuance of a certificate of occupancy, a certificate of compliance, certificate of approval or certificate of conformity as hereinafter prescribed. Refer to Wyandotte Code of Ordinances for regulations for parking on City streets and in residential areas (Section Chapter 35, Article (III)).

- A. Except as specifically permitted in the P-1 Vehicular Parking District, off-street parking or off-street parking areas shall not be permitted as the sole or principal permitted use in any zoning district.
- B. Off-street parking for other than residential uses shall be either on the same lot or within a reasonable distance of the building it is intended to serve as determined by the Planning Commission. Ownership or control shall be shown of all lots or parcels intended for use as parking by the applicant.
- C. Off-street parking spaces may be located within a side or rear yard. Off-street parking shall not be permitted within a required front yard unless otherwise provided for in this ordinance.
- D. In all districts parking abutting a street shall be set back from the property line not less than five (5) feet and such setback shall not be paved.
- Parking in industrially zoned districts shall be allowed in a required front yard.
- F. Off-street parking spaces for one and two-family dwellings shall be designated on a parking ribbon, on a driveway, or in a garage, or combination thereof. To construct or replace a driveway for said dwellings, a site plan shall be submitted, approved and a zoning permit issued by the Engineering and Building Department

to the homeowner or a contractor, to ensure proper placement as regulated by this ordinance. Said spaces shall be provided with asphalt or concrete surfaces, and shall be located on the premises they are intended to serve. Garages/accessory structures shall be subject to the provisions of Section 2402 Of this ordinance.

- G. Any area once designated as required off-street parking shall not be changed to any other use unless and until equal parking spaces are provided elsewhere.
- H. Two (2) or more buildings or uses may collectively provide the required off-street parking in which case the required number of parking spaces shall not be less than the sum of the requirements for the several individual uses computed separately.
- In the instance where the same off-street parking spaces are to be utilized by two (2) or more businesses or other uses, providing the operating hours of the businesses do not overlap, the Planning Commission may, after a public hearing, grant a Special Land Use for the joint use of the same parking facilities in accordance with Article XXII.
- J. The storage of merchandise, motor vehicles for sale, trucks, or the repair of vehicles is prohibited in parking areas.
- K. For those uses not specifically mentioned, the requirements for off-street parking facilities shall be in accordance with a use which is similar in type.
- L. For the purpose of computing the number parking spaces required, the definition of Floor Area Usable, in Article II, Definitions, shall govern unless specifically mentioned otherwise herein.
- M. Whenever off-street parking requirements shall be determined on a square footage of usable floor area basis, the usable floor area for planned commercial centers and freestanding retail commercial uses, other than grocery stores and restaurants, shall be seventy-five (75) percent of the gross floor area.
- N. When units or measurements determining the number of required parking spaces result in the requirement of a fractional space, a full space shall be provided.
- O. Whenever the City Council shall establish off-street parking spaces by means of special assessments, the required number of spaces may be reduced by that number of spaces which can be prorated to the use which was specially assessed.

P. CBD parking

 Within the central business district (CBD) zoning district, as shown on the City of Wyandotte zoning map, all uses except for those listed below are exempt from the off-street parking requirements contained in subsection R of Section 2403.

- (a) Residential uses
- (b) Funeral homes/mortuary establishments
- (c) Hotels and motels
- (d) Hospitals
- (e) Clinic
- (f) Private clubs
- 2. For properties within the "Developed Business Area" but not zoned CBD Central Business Zoning District, the provisions of Subsection R of this Section shall be reduced by one-half (1/2) the minimum required spaces for all uses except residential. The "Developed Business Area" for purposes of this subsection is that area illustrated on map 2403A.

Map 2403A

- Q. Required parking spaces shall be provided free of charge to parking lot users.
- R. The minimum number of off-street parking spaces by type of use shall be determined in accordance with the following schedule:

| Use | | | Minimum Number of Parking Spaces Per U nit of Measure |
|-----|-------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Resid | lential Uses | B T I I I I I I I I I I I I I I I I I I |
| | a. | One and Two-Family | One (1) for each dwelling unit |
| | b. | Multiple-Family | Two (2) for each dwelling unit of two (2) rooms or less; two and one-half (2 1/2) for each dwelling unit of three (3) or more bedrooms. Plus one (1) additional parking space for every eight (8) units for guest parking. |
| | c. | Housing for the Elderly | One (1) for each three (3) dwelling units and one (1) for each employee in the largest working shift. Should units revert to general occupancy, the standards of paragraph b above shall apply. |
| | d. | Bed and Breakfast or rooming houses | One (1) for the owner or resident manager and one (1) for each guest room. |
| 2. | Offic | e Uses | |
| | a. | Financial Institutions (banks, savings and loan offices, credit unions) | One (1) for each two hundred (200) sq. ft. of usable floor space plus four (4) waiting spaces for each drive-through window. |
| | b. | Business offices or professional offices except as indicated in the following paragraph c. | One (1) for each three hundred (300) sq. ft. of usable floor area |
| | c. | Professional offices of doctors, dentists, veterinarians or similar professions; outpatient clinic. | One (1) for each fifty (50) sq. ft. of usable floor area in waiting rooms and one (1) for each examining room, dentist chair, or similar use area and one (1) space for each two (2) employees |

3. Business and Commercial Uses

- Retail stores except as otherwise specified herein
- One (1) for each one hundred fifty (150) square feet of usable floor area, plus three (3) waiting spaces for each drive through window.
- Gasoline service stations with minor auto repair.
- One (1) for each gasolime pump plus one (1) for each service vehicle, plus one (1) for each employee, plus one (1) for each service bay in addition to the service bay. In those instances where convenience store merchandise is provided additional parking of not less than the requirement for a retail use, but not less than two (2) spaces separate from pump spaces shall be provided.
- Gasoline service stations (self serve).
- One (1) space for each gasoline pump plus one (1) space for each employee. In those instances where convenience store merchandise is provided additional parking of not less than the requirement for a retail use, but not less than two (2) spaces separate from pump spaces shall be provided.
- d. Gasoline service station with major auto repair
- One (1) for each gasoline pump, plus one for each employee, plus not less than two (2) for each service bay. In those instances where convenience store merchandise is provided additional parking of not less than the requirement for a retail use, but not less than two (2) spaces separate from pump spaces shall be provided. On street parking of service vehicles or vehicles awaiting services shall be prohibited.

e. Auto wash (automatic)

One (1) for each one (1) employee plus a minimum of fifteen (15) spaces for cars waiting to be washed for each conveyor system or line.

- f. Auto wash (coin operated or selfservice)
- Three (3) waiting spaces for each washing stall in addition to the stall itself.
- g. Beauty parlor, barber shop, tattoo parlor, salon or similar use

One and one-half (1 1/2) spaces for each beauty, barber chair or station, plus one (1) space for each employee.

h. Tanning Salon

One (1) space for each three (3) tanning booths.

Bowling alleys

Four (4) for each bowling lane plus parking for accessory uses.

j. Boat launching ramp

- Twenty-five (25) spaces for each 12 feet of launching ramp width. Each parking space is to measure 10 feet by 40 feet.
- Dance halls, roller rinks, exhibition halls and assembly halls without fixed seats
- One (1) for each seventy-five (75) square feet of usable floor area. In those instances where patrons are served without seating, one (1) space for each twenty (20) square feet of standing room floor area in addition to the above requirements shall be provided.
- Drive-in restaurants (food served in car)
- One (1) for each thirty (30) square feet of usable floor area plus one (1) for each two (2) seats in an established seating area.
- m. Drive-through restaurants
- Five (5) waiting spaces for each serving window; plus one (1) for each two (2) seats in an established seating area; plus one (1) for each employee.
- n. Establishments for sale and consumption on the premises of beverages, food or refreshments, including outdoor cafes
- One (1) for each seventy-five (75) square feet of usable floor area; plus one (1) for each employee. In those instances where patrons are served without seating, one (1) space for each twenty (20) square feet of standing room floor area in addition to the above requirements shall be provided.

 Furniture and appliance, hardware, laundries/dry cleaning, household equipment, repair shops, showroom of a plumber, decorator, electrician or other similar uses One (1) for each six hundred (600) square feet of usable floor are a plus one (1) for each two (2) employees

 Laundromats and coin operated dry cleaners One (1) for each two (2) washing machines or dry cleaning machines.

q. Marina and boat livery facilities

One and one-half (1 ½) spaces per boat mooring slip, plus one (1) additional space for every four (4) boat racks or storage spaces either inside or outside of a boat storage building where the business provides an in-out boat launching service. Required parking spaces may be utilized for winter boat storage from September 15 to May 1. Plus additional spaces as required for accessory uses.

Boat liveries shall provide one (1) space for each two (2) boats available for rent.

r. Miniature or "par-3" golf courses

Three (3) spaces per hole plus one (1) for each employee.

s. Driving range

One (1) for each tee

Mortuary establishments

One (1) for each fifty (50) square feet of usable area of assembly room and parlors.

u. Motel/hotel

One (1) for each occupancy unit, plus one (1) for each employee, plus spaces as required for accessory uses

v. Motor vehicle sales establishments, boat showrooms

One (1) for each two hundred (200) square feet of usable floor area of sales room plus one (1) for each service stall in service areas.

- W. Open air business establishments except as listed in paragraph v. above.
- One (1) for every five hundred (500) square feet of lot area for retail sales and retail uses.

- x. Pool hall and/or arcade
- Two (2) for each game table and one (1) for each amusement device, or one (1) for each one hundred (100) square feet of usable floor area in the game room, whichever is greater.
- y. Studios: dance, music and other similar places of instruction
- One (1) for each one hundred and fifty (150) square feet of usable floor area
- Supermarket (self service food stores)
- One (1) for each one hundred and fifty (150) square feet of usable floor area.

aa. Health club

- One (1) for every two (2) lockers or one (1) for each one hundred (1 00) square feet of usable floor area, which ever is greater.
- bb. Outdoor Special Assembly area
- One (1) space per each ten (10) square feet of assembly area in addition to requirements for additional accessory uses on site, plus one (1) space for each employee.

4. Industrial Uses

- a. Major automotive repair
- One (1) for each four hundred (400) square feet of usable floor area, plus one (1) for each employee. (Does not include storage of wrecked or repaired vehicles)
- Industrial establishments including manufacturing, research and testing laboratories or similar uses and related accessory offices
- Five (5) plus one (1) for each employee in the largest working shift.

- Warehouse and wholesale establishments and related accessory offices
- Three (3) plus one (1) for each (1) employee in the largest working shift, or five (5) plus one (1) for every seventeen hundred (1700) sq. ft. of usable floor area, whichever is greater.

d. Truck sales and services

One (1) for each two hundred (200) square feet of usable floor area of sales room, plus one (1) for each service stall in the service area.

5. Institutional Uses

a. Places of worship

One (1) for each four (4) seats or eight (8) feet of pew in the main unit of worship. In places of worship where seating is not provided such as mosques, one (1) space for each thirty (30) square feet of worship room.

 Elementary or junior high schools One (1) for each teacher, employee, or administrator or the requirements of the auditorium, whichever is greater.

 Homes for the aged and convalescent homes. One (1) for each four (4) beds, plus one (1) for each two (2) employees in the largest working shift

d. Hospitals

One (1) for each one (1) bed plus one (1) for each two (2) employees in the largest shift, plus spaces as required for related uses.

e. Library, museum and post office

One (1) for each one hundred fifty (150) square feet of usable floor area.

f. Post Office

One (1) for each employee in the largest shift plus one (1) for each one hundred and fifty (150) square feet of lobby area.

 g. Nursery Schools, day care centers or child care centers One (1) for each three hundred fifty (350) square feet of usable floor area plus one (1) for each employee.

h. Private clubs or lodge halls

Whichever of the following requires the greatest amount of parking:

One (1) space per club member and one
 space per guest, or

2. One (1) space per occupancy permitted as determined by the Michigan Building Code

based on plans submitted by the applicant, or

3. One (1) space for each one hundred (100) square feet of usable floor space.

i. Senior high schools

One (1) for each teacher, employee or administrator, and one (1) for each ten (10) students, or the requirements for an auditorium, whichever is greater.

j. Stadium or sports arenas or similar outdoor place of assembly One (1) for each four (4) seats or eight (8) feet of benches

k. Swimming pool clubs or similar uses

One (1) for each three (3) member families or individuals, plus spaces as required for accessory uses.

Tennis clubs or similar uses

Three (3) for each court, plus spaces as required for accessory uses.

m. Theaters and auditoriums

One (1) for each four (4) seats, or one for each sixty (60) square feet of floor area in the assembly room without fixed seats, plus one (1) for every two (2) employees.

6. Barrier free design: Off-street parking areas shall conform with all applicable requirements of the Michigan Department of Labor Construction Code Commission in accordance with Act 1 of the Public Acts of 1966, as amended; MCLA 125.1352 and Act 230 of the Public Acts of 1972; as amended; MCLA 125.1508.

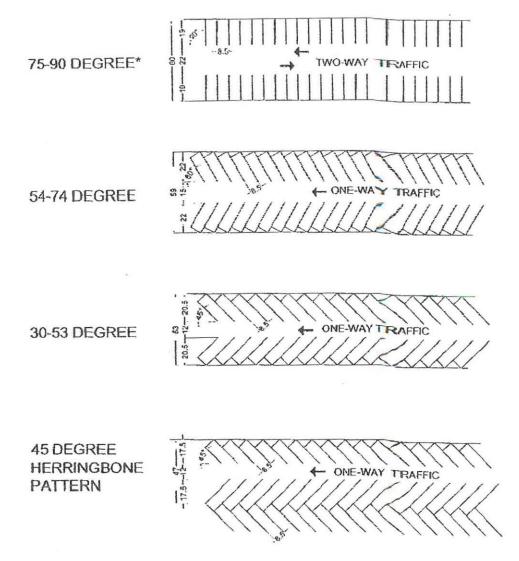
2404 OFF-STREET PARKING SPACE LAYOUT, STANDARDS, CONSTRUCTION AND MAINTENANCE.

Wherever the off street parking requirements in Section 2303 require the building of an off street parking facility which consists of three (3) or more parking spaces, or where P-1 Vehicular Parking Districts are provided, such off-street parking areas shall be laid out, constructed and maintained in accordance with the following standards and regulations:

A. No parking area or off street parking facility shall be constructed or reconstructed unless and until a permit therefore is issued by the City Engineer. Applications for a permit shall be submitted to the City Engineer for approval. The application shall be submitted with two (2) sets of site plans for the development and construction of the parking area or off-street parking facility showing the provisions of this section will be fully complied with. The dumpster and

- transformer, if required, shall be shown on submitted plan. La indscape plans shall be submitted as required in Section 2307.
- B. Adequate ingress and egress to the parking area or parking facility by means of clearly defined drives shall be provided for all vehicles. Such necessary directional signs and controls as are required shall be established and maintained by the owner or lessee. All spaces shall be provided adequate access by means of maneuvering lanes. Backing directly onto a street shall be prohibited.
- C. In an industrially zoned area, the requirements of paragraph B of this section may be modified with the approval of the City Engineer and the Police Department.
- D. Plans for the layout of off street parking facilities shall be in accord with the following minimum requirements.

| Parking Pattern (degrees) | Maneuvering Lane Width. | Parking Space Width | Parking Space Length |
|---------------------------------|----------------------------|---------------------------|----------------------------|
| 0 (parallel parking) | 12 ft. | 8 ft. | 23 ft. |
| 30 to 53 | 12 ft. | 8 ft6 in. | 20 ft. |
| 54 to 74 | 15 ft. | 8 ft6 in. | 20 ft. |
| 75 to 90 | 22 ft. | 8 ft6 in. | 19 ft. |
| Small car design | | | |
| (90 degree only) | 21 ft. | 8 ft. | 15 ft. |



* Small car parking only at 90° - parking stall width 8', parking stall length 15', maneuvering lane width 21'.

PARKING LAYOUTS

Only parking lots with double loaded aisles may incorporate small car design standards into their parking layout. A maximum of twenty (20) per cent of the parking spaces may utilize the small car design standard. Such spaces shall be clearly marked for small car usage.

- E. All maneuvering lane widths shall require one-way traffic movement, with the exception of the ninety (90) degree pattern where two-way movement may be permitted.
- F. Each entrance to and exit from any off-street parking lot or parking facility shall be at least twenty (20) feet in distance from adjacent property which is zoned residential.
- G. The entire parking area, including parking spaces and maneuverings lanes, required under this section shall be provided with asphaltic or concrete surfacing in accordance with specifications approved by the City Engineer.
- H. Off-street parking areas or parking facilities shall be constructed or reconstructed as specified in Section 2404 of the Wyandotte Zoning Ordinance and require a permit from the Department of Engineering and Building before work begins. Two (2) sets of plans must be submitted showing, but not limited to, the following information: Location, dimensions and elevations with respect to lot lines and existing building, location and elevations of paved streets or alleys and existing drainage structures, type of surface construction, proposed drainage pattern, proposed drainage structures, and landscaping.
- Off-street parking areas shall be drained so as to dispose of all surface water accumulated in the parking area in such a way as to prevent drainage of water onto adjacent property or toward buildings. Surface water on all paved areas shall be collected at intervals as required so that it will not obstruct the flow of vehicles or pedestrian traffic and will not create nuisance ponding in paved areas.
 - Surface run-off is acceptable for small parking lots if the Engineer determines that a nuisance to pedestrian or vehicular traffic is not created.
 - When catch basins are utilized, plans must be submitted for the permit. Plans must include a maximum six (6) inch diameter storm sewer where connecting to the public sewer, details of the catch basin (must have a two (2) foot sump), sewer main connection, grades indicating surface flow of the parking lot, and a restrictive catch basin grate. Hydraulic information may be required by the City Engineer showing the impact on the public sewer and verifying that the proposed additional flow will not adversely affect the public sewer main capacity.
- J. In all cases where such parking facilities abut public or private sidewalks, a curb at least six (6) inches in height or bumper guards shall be placed thereon so that a motor vehicle cannot be driven or parked extending over a public or private

sidewalk or within five (5) feet of a front of a building. A side walk not less than five (5) feet in width shall be provided wherever parking abuts a wall of the main entrance to a building.

- K. A six-inch high curb or bumper guards shall be provided to prevent motor vehicles from striking any structure, wall or fence.
- L. Off-street parking areas shall be provided with a continuous and completely obscuring wall or fence not less than five (5) feet, but not more than six (6) feet in height measured from the surface of the parking area. This wall or fence shall be provided on all sides where the abutting or adjacent property is used or designated as residential and shall be of solid type material such as brick, block or poured concrete or other approved material as determined by the Zoning Board of Appeals upon appeal and shall meet the requirements of the P-1 District, Section 1902, Minimum Distances and Setbacks. The obscuring wall or fence shall be properly maintained. The side lot line required wall shall end a minimum distance of ten (10) feet from the front line.
- M. Dumpster areas shall be screened to obscure the dumpster from any public street or residential area. Screening materials shall be masonry or other durable material. Transformers shall be screened with landscaping.
- N. All lighting used to illuminate any off street parking area shall be so installed as to be confined within and directed onto the parking area only. When a parking lot abuts a Major Thoroughfare lighting fixtures shall be provided in the private greenbelt adjacent to the street. This lighting will be required to be the following:

Manufacturer: Holophane Unique Solutions

515 McKinley Avenue, Newark, OH 43055

Post: Burlington Series, Black Cast Aluminum 11" Sq. Base 4"

dia. Fluted Shaft

Light: GranVille Series Luminaire, Leaf Style Housing

Arm Mount: Philadelphia Series, Black Cast Aluminum 36"

Height: Twelve (12) feet except on Eureka, Biddle and Fort Streets

where the height shall be fourteen (14) feet.

Spacing: Lights shall be spaced not more than fifty (50) feet apart.

Fixture Heads: Two (2) head fixtures are required on Eureka, Biddle and Fort Streets; all other streets require single head fixtures.

Two (2) headed fixtures shall be located perpendicular to

the street.

O. In all cases where a wall extends to an alley which is a means of ingress and egress to a parking area, it shall be permissible to end the wall not more than ten (10) feet from such alley line in order to permit a wider means of access to the parking area.

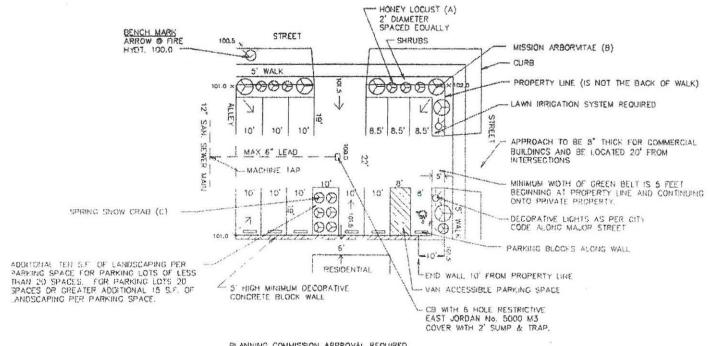
EXAMPLE

PARKING AND USED

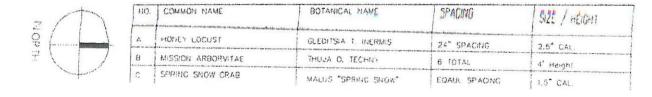
CAR

LOT LANDSCAPING

& DRAINAGE



PLANNING COMMISSION APPROVAL REQUIRED FOR NEW PARKING LOTS OF 6 OR MORE SPACES AND FOR RECONSTRUCTED PAREING LOTS OF 10 OR MORE SPACES



- P. The Planning Commission, where it has site plan review, upon application by the property owner of the off-street parking area, may modify the yard or wall requirements where no good purpose would be served by the compliance with the requirements of this section.
- Q. For all new parking areas and used car lots of six (6) or more spaces and all existing parking areas and used car lots to be reconstructed of ten (10) or more spaces, the following requirements shall apply. The off-street parking area shall have a planting area of at least five (5) feet in width along any abutting dedicated street right-of-way. Additional planting areas shall be required equaling at least ten (10) square feet in area for each parking space. Parking and used car lots of twenty (20) or more parking spaces shall provide fifteen (15) square feet of landscaping for each parking space. Planting areas shall be so located as to divide and break-up the expanse of paving. Landscape planting areas shall be subject to the requirements of Section 2407 of this ordinance.
- R. All parking lot landscaped areas shall be provided with under ground irrigation.
- Bars and restaurants shall not have parking access from an alley which abuts residential properties.
- A survey by a registered land surveyor may be required by the City Engineer.

2405 PERFORMANCE STANDARDS

Uses permitted within any district shall conform to the following standards of use, occupancy, and operation:

- A. Smoke, Dust, Dirt and Fly Ash: It shall be unlawful for any person, firm or corporation to permit the emission or discharge of any smoke, dust, dirt or fly ash in quantities greater than prescribed in the codes and ordinances of the City of Wyandotte.
- B. Open Storage: The open storage of any equipment, vehicles, and all materials, including wastes, shall be screened from public view, from a public street and from adjoining properties by an enclosure consisting of a wall or an obscuring fence not less than eight (8) feet in height, except as otherwise provided herein. Scrap, junk cars and other junk materials shall not be piled or stacked as open storage to a height in excess of twenty-five (25) feet. Sand, gravel, aggregate, slag or other materials of this nature, piled or stored outside buildings shall not exceed the height of forty (40) feet.

2407 LANDSCAPE PLANTING

Wherever in this ordinance a landscape planting screen or landscape plantings are required the developer shall provide a surety bond or escrow money acceptable to the city engineer in an amount sufficient to insure completion in accordance with the approved planting plan prior to the issuance of any building permits. Such landscape plantings shall be planted in accordance with an approved planting plan, planted to completion and approved by the city engineer prior to issuance of a certificate of occupancy, certificate of compliance, certificate of approval or certificate of conformity unless the structure or required paving construction is completed in an off planting season, in which case temporary certificates will be issued; however, all required plantings shall be placed to completion within sixty (60) days of the next planting season. Failure to place the required plantings within sixty (60) days of the next planting season shall be grounds for termination or revocation of a temporary certificate and subject the property owner to the fines and penalties of Article XXXII. No additional certificate, either temporary or final will be issued until all required plantings are placed to completion.

All plantings shall consist of permanent, living plant materials and shall be so planted as to be in a healthy growing condition. Planting materials shall be maintained in a healthy growing condition which shall include watering, cultivation and weed control, and further maintained in a neat and orderly appearance free of refuse and debris. All unhealthy and dead plant materials shall be replaced within three (3) months or during the next appropriate planting season.

- A. Whenever a landscape planting screen or landscape plantings are required under the provisions of this ordinance, a site plan together with a detailed planting plan of said screen or plantings, shall be submitted to and be approved by the Planning Commission prior to issuance of a building permit. Estimated costs shall also be submitted with the detailed planting plans. Detailed plans shall be submitted in accordance with the following:
 - 1. A minimum scale of one (1) inch equals forty (40) feet.
 - Plans shall indicate, to scale, the location, spacing, starting size and description for each unit of plant material proposed for use within the required screening or planting area, together with the finished grade elevations therein.
 - Plans shall indicate the proposed location and height of all structures, proposed location of off street parking areas, points of ingress and egress to the site, location of walks and roadways, location of proposed outside storage, dumpster areas, loading or service areas and transformers.
 - Plans shall indicate existing plant or tree cover including types of trees and tree height.

- B. The planting plan shall be reviewed relative to the following:
 - The proper spacing, height, placement, location and type of plant materials.
 - (a) To insure landscape screens are the length and width so the required horizontal and vertical obscuring effect of proposed land uses will be achieved.
 - (b) To insure landscape planting areas are planted with in the minimum requirements as set forth in this ordinance.
 - The choice and selection of plant materials so as to in sure that root systems will not interfere with public utilities and that fruit and other debris (excluding leaves) will not constitute a nuisance within public rights-of-way or to abutting property owners.
 - 3. The choice and selection of plant materials are of types that will survive and thrive in the area which they are to be located. It is suggested that a mixture of plant materials (evergreen and deciduous trees and shrubs) be provided in all landscape plans as a protective measure against disease and insect infestation.
 - (a) Where landscape screens are required a proper relationship exists between deciduous and evergreen plant materials to assure that the desired obscuring effect will be maintained throug hout the various seasonal periods.
 - 4. The size of plant materials (both starting and ultimate).
 - (a) Where landscape screens are required to insure adequate maturity and optimum screening effect.
 - (b) Where landscape planting areas are required, such areas are to be safely located from any building, point of ingress or egress and not create a traffic hazard.
- C. Landscape planting screens and landscape planting areas shall consist of suitable plant materials laid out in conformance with the following:
 - Landscape planting screen:
 - (a) Plant materials (except creeping vine type) shall not be located within two (2) feet of a property line.

- (b) Where plant materials are planted in two (2) or me ore rows, planting shall be staggered in rows.
- (c) Evergreen trees shall be a minimum of six (6) feet in height. When planted in informal groupings, they shall be spaced not less than ten (10) feet on centers. If placed further apart, additional screen plantings shall be used to achieve the desired obscuring effect. When planted in rows, they shall be spaced not more than eight (8) feet on centers.
- (d) Narrow evergreen trees shall be a minimum of five (5) feet in height. When planted in informal groupings, they shall be spaced not more than ten (10) feet on centers. When planted in rows, they shall be spaced not more than five (5) feet on centers.
- (e) Tree-like shrubs shall be a minimum of six (6) feet in height and spaced not more then ten (10) feet on centers.
- (f) Large deciduous shrubs shall be a minimum of four (4) feet in height and spaced not more then six (6) feet on centers.
- (g) Deciduous trees shall be a minimum of eight (8) feet in height with a minimum caliper of two and one-half (2-1/2) inches, they shall be spaced not more than thirty (30) feet on centers.

D. Street trees

In addition to parking lot landscape requirements as specified in section 2304. P and Q, street tree shade trees shall be provided between the curb and sidewalk or if space is not adequate between the curb and sidewalk, trees shall be located on private property spaced thirty—five (35) feet on centers along all street frontages. On streets under the jurisdiction of the County or the State, plans for street trees shall be subject to the requirements of such agency.

E. Yard Planting

- Yard planting exposed to public view shall be required in all multiple family, office service, neighborhood business, general business and all industrial districts. Plantings shall consist of shrubs, trees, flowers and lawns as may be appropriate.
- The pavements surface in any residential yard shall not exceed fifty (50)
 percent for a required front yard.
- F. Landscaping planting areas.

 Spacing Between and Minimum Size of Plant Mater als (in feet) shall be as follows:

| Plant Material Types | Narrow Evergreen Trees | Evergreen Trees | Tree-Like Shrubs | Large Deciderous Trees | Large Shrubs |
|-------------------------|------------------------------|----------------------|---------------------|------------------------------|--------------------|
| Narrow evergreen | Min. 5' Max. 10' | Min. 12' | Min. 10' | Min. 15' | Min. 5' |
| Evergreen trees | Min. 12' | Min. 10' Max. 20' | Min. 12' | Min. 20' | Min. 6 |
| Tree like shrubs | Min. 10' | Min. 12' | Min. 8' Max. 15' | Min. 15' | Min. 6' |
| Large deciduous | Min. 15' | Min. 20' | Min. 15' | Min. 20' Max. 30' | Min. 6' |
| Large Shrubs | Min. 5' | Min. 6' | Min. 6' | Min. 6 | Min. 4' Max. 6' |

Narrow evergreen trees, five (5) feet in height. Evergreen trees, six (6) feet in height. Tree-like shrubs, six (6) feet in height. Large deciduous trees, two and one-half (2-1/2) inch caliper Large deciduous shrubs, four (4) feet in height.

- 2. Trees not permitted (all locations):
 - (a) Box elder
 - (b) Soft maples
 - (c) Elms
 - (d) Horse chestnut (nut-bearing)
 - (e) Tree of Heaven
 - (f) Catalpa
 - (g) Ash
- 3. Trees not permitted within street right-of-way:

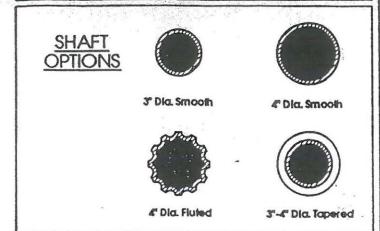
- (a) Basswood
- (b) Cottonwood
- (c) Willow
- 4. On the following table is a list of suggested plant materials. Size, special characteristics and tolerances are given to aid in determining what plant materials are right for an individual situation. This list is not intended to be a comprehensive list of plant materials, especially in the area of deciduous shrubs.

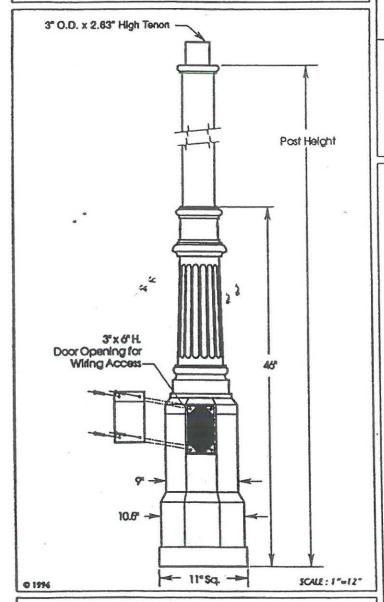
| T – Tolerant | | | | | | | | | | | | 0) | Ped Level Massing | wers | it | Good Fall Color | 1 | |
|--------------------------------|--------------|------|---------|-----|--------|--------|-----|-----|----|-----|------|---------------|-------------------|--------|------------------|-----------------|-----------|-------------|
| I – Intolerant | ili | | | | | | | | | | 186 | age | Ma | 101 | rr | 201 | res | 9 |
| S – Slow | Deicing Salt | | 1 | | | Medium | | | | dal | oile | Dense Foliage | l la | l a | Attractive Fruit | 1/1 | nte | Growth Rate |
| M - Moderate | ing | | Drought | le | Course | inn | | | nd | mi | F | e I | Je v | cti | cti | Fe | rI | th |
| F-Fast | eic | Heat | roi | 100 | ino | fed | ine | val | no | vra | 48 | ens | p | tra | tra | 200 | inte | 0.0 |
| V – Varies | D | H | P | S | C | N | F | 0 | R | P | T | D | Pe | AL | At | Ğ | W | 3 |
| Shade (Canopy) trees 50' - 60' | | | | | | | | | | | | | | | | | | |
| Hackberry | T | T | T | T | | X | | X | | | | | | | | | | F |
| Honeylocust, Thornless | T | T | T | | | | X | | X | | X | | X | | | | | F |
| Linden, American | I | | | T | X | | | X | | | | X | X X | X | | | | M |
| Maple, Norway | T | | 1 | | X | | | | X | | | X | X | | | | | M |
| Maple, Red | I | | | T | | X | | X | | | | | | X | | X | | F |
| Maple, Sugar | 1 | I | | T | | X | | X | | | | X | | | | X | | S |
| Oak, Pin | I | | I | T | | X | | | | X | | | X | | | X | X | M |
| Intermediate Trees 30' - 40' | | | | | | | | | | | | | | | | 1 | | |
| Birch, River | | | | T | | | X | X | | | X | | X | | | X | X | F |
| Linden, Greenspire | | | | T | | X | | | | X | | X | X | X | | | | F |
| Linden, Littleleaf | | | I | T | | X | | X | | | X | X | X X X | | | | | M |
| Linden, Redmond | | | | T | X | | | 3 | | X | | X | X | X | | | | M |
| Low trees 15' - 25' | | | | | | | | | | | | | | | | | | - |
| Beech, Blue | | | | T | | | X | | X | | | | X | | | X | | S |
| Crabapple | 1 | | | I | | X | | X | X | | | | X | X | X | | X | S |
| Dogwood, Pagoda | | | | T | | X | • | X | | | | | X | X | | X | | M |
| Hawthorn, Thornless | 1 | | | | | X | | | X | | | | X X | | X | | | F |
| Maple, Amur | T | | | T | | X | | | X | | | | X | | | X | | F |
| Mountain Ash, European | 1 | | T | 1 | | | X | X | X | | | | X | | | - | \exists | M |
| Olive, Russian | T | T | T | | | | X | | X | | | | X | | | | | F |
| Shadblow Serviceberry | | | | T | | X | | X | | | X | | X | \neg | | \dashv | | F |
| Evergreen trees 50' - 60'. | | | | | | | | | | | | | | | | | | ÷ |
| Pine, Austrian | T | | | T | | X | | | | X | | | X | | | - | X | F |
| Pine, Scotch | T | 1 | | | | X | | | | X | | | X | \neg | | - | X | F |
| Spruce, Black Hills | Т | T | T | | | X | | | | X | | | X | | | | X | M |

| T – Tolerant | | | | | | | | | | | | Dense Foliage | sing | vers | 1 | 7.0 | | |
|------------------------------------|--------------|------|------|-------|-----|--------|----|-----|------|-----|-----|---------------|------|------|-----|------|-----------------|-------------|
| I – Intolerant | 1,1 | | | | | | | | | | ge | 386 | las | lon | rui | Jole | Winter Interest | 1 |
| S – Slow | Sa | | | | | | | | | lal | lia | olie | 77 | E F | E F | 11.0 | iter | Sate |
| M – Moderate | Deicing Salı | | Shi | Shade | se | иш | | | a | nia | Fo | T | eve | tiv | tiv | Fa | 17 | Growth Rate |
| F – Fast | eici | Heat | non | ad | Jur | edi | ив | val | un | rai | ght | SHE | d L | rac | rac | od | nte | MO |
| V – Varies | Q | H | Ñ | Sh | ŭ | Medium | Fi | 0 | Rc | P | Li | Q | pe | Att | Att | B | Wi | 3 |
| Spruce, Colorado | T | | | | | X | | | | X | | | X | | | | X | S |
| Deciduous Shrubs 4 1/2' and taller | | | | | | | | | | | | | | | | | 1 | 3 |
| Buckthorn, Columnar | T | T | | T | | X | | X | | | | | X | | X | | | F |
| Chokeberry, Black | | | | T | | X | | | X | | | | X | X | X | X | | S |
| Dogwood, Redtwig | I | | | | | X | | | X | | | | X | X | | 7. | X | F |
| Euonymous, Winged | I | | | | X | | | X | | | X | | X | - | | X | X | S |
| Lilac, French | | | | T | | X | | | X | | | | X | X | | 1 2 | - | M |
| Ninebark, Golden | | | | T | | X | | | X | | | | X | - | | | | F |
| Deciduous Shrubs 4 1/2' and taller | | | | | | | | | | | | | | | | | | - |
| Deciduous shrubs under 4 1/2' | | | | | | | | | | | | | | | | | | |
| Currant, Alpine | T | T | | | | | X | | X | | | X | X | | | | | M |
| Barberry, Japanese | 1 | | Т | T | X | | | | X | | | | X | | X | X | X | M |
| Cranberry Bush, Compact | I | | | | | X | | | X | | | | X | | | | | |
| Honeysuckle, Emerald Mound | | | | T | | X | | | X | | | | X | X | X | | | M |
| Potentilla | T | T | T | | X | | | | X | | | | X | X | | | | M |
| Spiraea, Anthony Waterer | | | | T | | X | | | X | | | | X | X | | | | M |
| Evergreen shrubs (height varies) | | | | | | | | | | | | | | | | | | |
| Arborvitae | | Va | ries | | | X | | V | ario | es | | | X | | | | X | S |
| Junipers | | Va | ries | | | X | | V | ari | es | | | X | | | | X | V |
| Pine, Mugho | | Va | ries | | | X | | V | ari | es | | | X | | | | X | S |
| Yews | | Va | ries | | | X | | V | ari | es | | | X | | | | X | S |
| Groundcovers 1'-2' | | | | | | | | | | | | | | | | | - | _ |
| Cinquefoil Wineleaf | | | Т | | | | X | | | | | | X | | | X | | F |
| Crownvetch | | | T | T | | | X | | | | | | X | X | | - | 1 | S |
| Creeper, Virginia | T | | Т | T | X | | | | | | | | X | | | X | | F |
| Fleeceflower | | T | T | | | X | | | | | | | X | X | X | | X | F |

- All parking lot landscaped areas shall be provided with underground irrigation.
- 6. Except as otherwise allowed or specified in this ordinance, all land in all use districts located between abutting public right-of-way, railroad right-of-way or waterway shall be landscaped and well maintained in grass, ground cover, shrubs or trees.

BURLINGTON SeriesCast Aluminum Posts





HOLOPHANE UNIQUE SOLUTIONS

\$15 McGaley Avenue . Newark, Ohio 43055 . (614) 349-4160 . Fax 1-800-346-5923

ORDERING GUIDE

sample catalog numb er

| Post | | material/finish | 1000 | options |
|---------------------------------------------------|-----|------------------------|------|------------------------------------------------|
| BURLINGTON 12' Smooth 4" shaft 11" sq. base | • . | Cast Aluminum Black | • | Weatherproof Receptacle at Top (of post) |

| Post (check app | roprises boxes, add height in bla | nk) |
|--------------------------------------|-----------------------------------|------------------------------------------------|
| Catalog # | Shoot Type | Helahis |
| OBL_S3/11 OBL_S4/11 OBL/2F4/11 | 3 dia. smooth | 8', 10', 12' 8', 10', 12', 14' |
| OBL_T4/11 | 3 - 4" dia. tapered | 8', 10', <u>12'</u> , 14' 8', 10', 12', 14' |

| Catalog Sulfix | Description |
|----------------|-----------------------------|
| CA/BK | Cast Aluminum/Black (std.) |
| U-CA/DG | Cast Aluminum/Dark Green |
| Q-CA/DB | Cast Aluminum/Dark Bronze |
| C-CA/PP | Cast Aluminum/Prime Painted |
| Q-CA/CC | Cast Aluminum/Custom Color |

Optional Equipment

Catalog Suffix

OPTION

Receptacles (see Accessories section)

Banner Arms (see Accessories section)

Graph Pole Holders (see Accessories section)

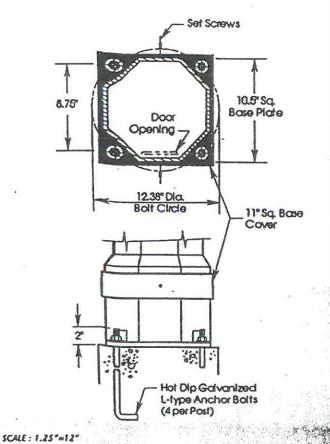
Custom Logos (see Accessories section)

Custom Logos (see Accessories section)

Signage (see Signage section)

(for optional equipment not focured in catalog, consult factory)

ANCHORAGE GUIDE

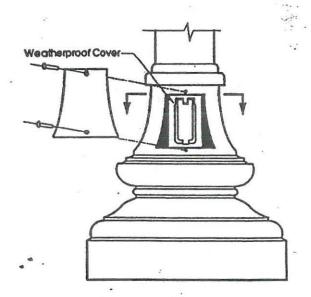


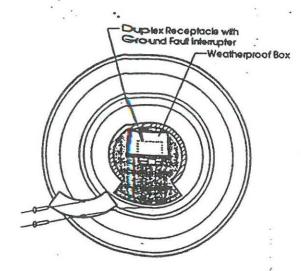
TVDE HI

Weatherproof Receptacles Internal, Base Location

Internal receptacles are typically installed for use by authorized personnel for special events and owner maintenance purposes.

- Ground Fault Circuit Interrupter Receptacles.
- Test/Reset buttons on face of receptacles.
- All cast aluminum cover, not plastic.





SCALE: 1.5"=12"

Receptacle with Weatherproof Box and Cover

Catalog part #

RB - receptacle in base GR - ground fault interrupter WPC - weatherproof cover

SPECIFICATIONS

A 20 amp, 125 volt, ground fault circuit interrupter duplex receptacle shall be mounted insicle the post base, facing toward the access door. The receptacle shall be UL Listed according to E-48380 and UL 943 Class A and UL 498. The receptacle shall be mounted in a cast aluminum box and cover that is suitable for wet locations while not in use. The receptacle and cover shall mount to a outlet box with a gasket and stainless steel screws.

For information on specifying orientation and mounting heights see Orientation Guide in the back of the Accessories section in the catalog,

USI-3673 Jyse HI

HOLOPHANE UNIQUE SOLUTIONS

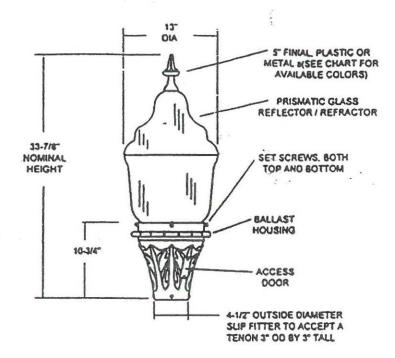
214 Oakwood Avenue • Newark, Ohio 43055 (614) 345-9631 • Fax 1-800-349-5923

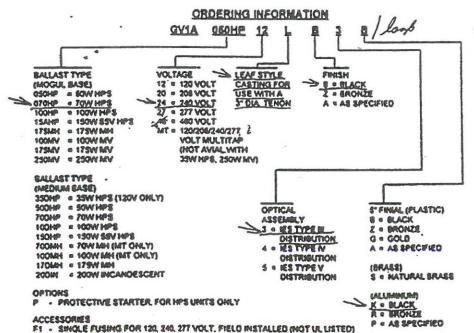


GranVille[®] Series Luminaire

With 5' Decorative Finial, Leaf Style Housing

Maximum weight - 45 lbs Maximum effective projected area - 1.26 sq. ft.





F2 - DOUBLE FUSING FOR 201, 240 VOLT, FIELD INSTALLED (NOT UL LISTED)
GYTAPRIZIOX - PHOTOCONTROL FOR 120 VOLT, LOCATED IN ACCESS COVER, FIELD INSTALLED. NOT UL LISTED
GYTAPRIZIOX-4277UX - PHOTOCONTROL FOR 204/240/277 VOLT, LOCATED IN ACCESS COVER, FIELD INSTALLED.

UNIQUE SOLUTIONS ORDER NO: US/-3673

NOT UL LISTED

"THE ORANING WHEN APPROVED SHALL BECOME THE COMPLETE SPECIFICATION FOR METERIAL TO BE FURNISHED BY UNIQUE SOLUTIONS ON THE ORDER NOTED ABOVE. TO F SIMILAR DESIGN MAY BE SUPPLIED, BUT ORLY AFTER APPROVAL BY THE OMER IN WRITING. ON POLE GROERS AN ANCHOR BOLT TEMPLATE PRINT WILL BE SUPPLIED WITH EACH ANCHOR BOLT GROER TO MATCH POLE PROVIDED.

THIS PRINT IS THE PROPERTY OF UNIQUE SOLUTIONS AND IS LOANED SUBJECT TO RETURN UPON GENAND AND UPON EXPRESS CONDITION THAT IT WILL NOT SE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS. AND ONLY IN COMMECTION WITH MATERIAL FURNISHED BY UNIQUE SOLUTIONS.

Specifications

GENERAL DESCRIPTION

The learningire consists of three main components. bate ase housing, a reflector with socket, and a priam glass optical assembly.

OP TICAL ASSEMBLY

The optical assembly is a precisely molded thermal reseast ant borosilicate glass reflector and refractor wi 5 ireche decorative finial, mechanically attached and sealed to the top glass reflector. The upper portion (this system incorporates a senes of reflecting prism: redirect over 50% of the upward light in to the contro refractor while allowing a soft uplight component to defice the traditional acom shape of the luminaire. T low or portion uses precisely molded refracting prism constroi the distribution of light to maximize utilization unicorrnity, and luminaire spacing. Three unique optiassemblies are available, designed for IES type III, I and 😾 lighting distributions.

BALLAST HOUSING

The ballast housing contains the ballast and other electrical components. The housing is cast of 356 oc free aluminum alloy with a raised oak leaf pattern an designed to flow gracefully from a 4" - 5" diameter decorative post. The slipfitter will accept a 3" high, 2to 3-1/6" O.D. tenon and is secured by four hex head statinitiess steel 1/4-20 x 1° set screws. Four uniquely designed stainless steel spring dips enclosed in a di polywinyl chloride sleeve and adjusted by hex head statelless steel 1/4-20 bolts securely cradle the optical ass embly. The housing is finished with polyester pow palent applied after a seven stage pretreatment proces insure maximum durability.

(Refer to Ballast Data Sheet for specific operating characteristics)

35 - 100 watt 120 voll High Pressure Sodium (HPS) beltases are High Power Factor Reactor type. All oth HPS beliests are High Power Factor Autotransformer

175 watt Metal Halide (MH) ballasts are Peak Leed Autotransformer type, 70 and 100 watt MH units are evailable only with (120V, 206V, 240V, 277V) multital High Power Factor High Reactance type ballast.

All Mercury Vapor (MV) ballasts are High Power Fact Constant Wattage Autotransformer (CWA) type.

REFLECTOR / SOCKET ASSEMBLY

The reflector/socket assembly is designed to position specified light source at the light center of the refract

UL LISTING

The luminaire is UL listed as sultable for wet location: a maximum 40 degree C ambient temperature.

HOITALLATION

Refer to the instruction manual provided with each luminaire as to the specific method of wiring and mounting the fuminaire.

DRAWING NO: US-108

A DIVISION OF HOLOPHANE

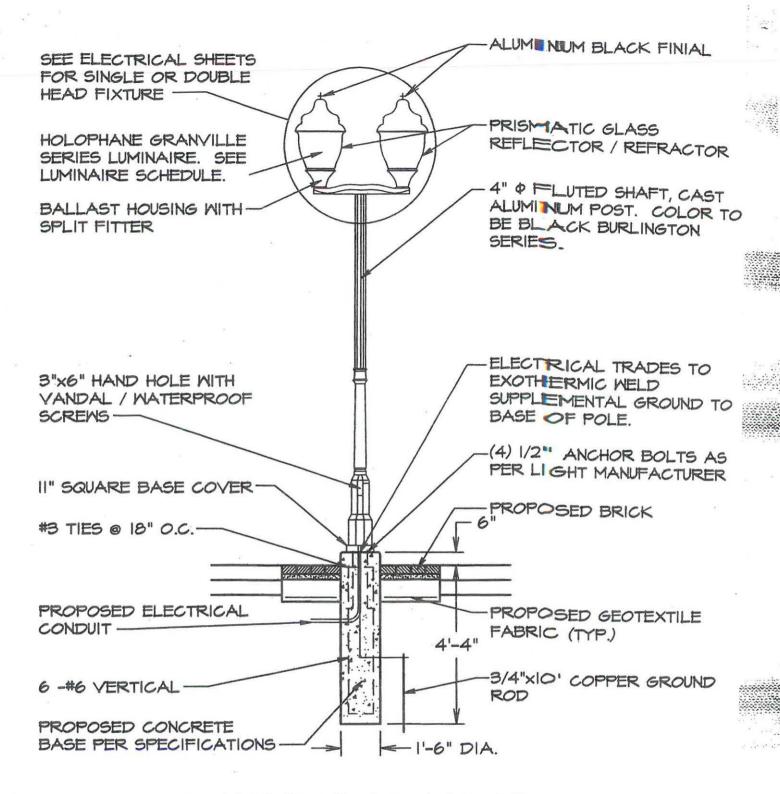
515 MCKINLEY AVENUE P.O. BOX 3009

NEWARK, OHIO 43055

SCALE: NONE DRAWN: RAF

APP'D:

DATE: 08-09-93



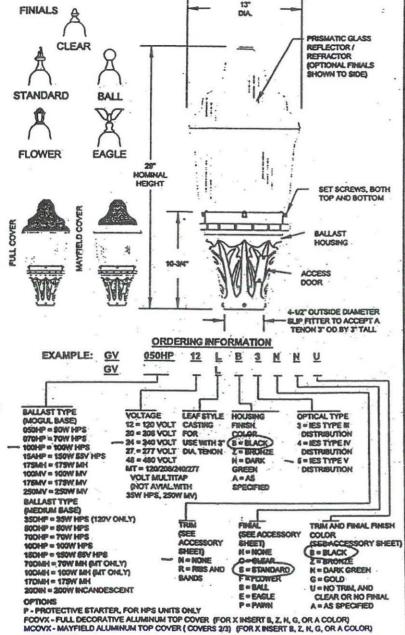
DOUBLE HEAD LIGHT WITH CONC. FOUNDATION

NOT TO SCALE

GRANVILLE®SERIES LUMINAIRE LEAF STYLE CASTING

MAXIMUM WEIGHT - 47 lbs.

MAXIMUM EFFECTIVE PROJECTED AREA - 1.26 sq. ft.



Specifications

GENERAL DESCRIPTION

The luminaire consists of three main components, a ballast housing, a reflectour with socket, and a prismatic glass optical assembly.

OPTICAL ASSEM BLY

The optical assembly is a precisely molded thermal resistant borosticate glass reflector and refractor with or without decorative finial. The supper portion of this system incorporates a series of reflecting prisms that redirect over 50% of the upwards light in to the controlling refractor while allowing a soft upto the component to define the traditional accome shape of the turning transcript. Two decorative eliminum top covers are available. The lower portion uses precisely molded refracting partisens to control the distribution of light to maximize utilization, uniformity, and luminaire spacing. Three unique optical assemblies are available, designed for IES type III, IV, and IV lighting distributions.

BALLAST HOUSING

The ballast housing contains the ballast and other electrical components. The housing is cast of 356 copper free aluminum alloy with a raised oak leaf pattern and is designed to flow gracefully from a 4" - 5" diameter decorative post. The slipfitter will accept a 3" high, 2-7/8" to 3-1/8" O.D. tenon and is secured by four hex head stainless steel 144-20 x 1" set acrews. Four uniquely designed stainless steel spring clips enclosed in a clear polyviny! chloride sleeve and adjusted by hex head stainless steel 1/4-20 bolts securely cradle the optical assembly. The housing is finished with polyester powder paint applied after a seven stage pretreatment process to insure maximum durability.

BALLAST

(Refer to Baliast Data Sheet for specific operating characteristics)

35 - 100 watt 120 wolt High Pressure Sodium (HPS) ballasts are High Power Factor Reactor type. All other HPS ballasts are High Power Factor Autotransformer type.

175 watt Metal Halticle (MH) ballasts are Peak Lead Autotransformer type. 70 and 100 watt MH units are available only with (120V, 208V, 240V, 277V) mutitap High Power Factor High Reactance type ballast.

All Mercury Vapor (MV) ballasts are High Power Factor Constant Wattage Autotransformer (CWA) type.

REFLECTOR / SOCKET ASSEMBLY

The reflector/socket assembly is designed to position the specified light source at the light center of the refractor.

UL LISTING

The luminaire is UL listed as suitable for wet locations at a maximum 40 degree C ambient temperature.

INSTALLATION

Refer to the instruction manual provided with each luminaire as to the specific method of wiring and mounting the luminaire.

GVIOOHPOOLB5 NSB

ARCHITECTURAL OUTDOOR ORDER#: 4032972 TYPE: H2

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER IN WRITING, ON POLE ORDERS AN ANCHOR BUT, TEMPLATE PRINT WILL BE SUPPLIED WITH EACH ANCHOR BUT ORDER TO MATCH THE POLE PROVIDED.

F1 - SINGLE FUSING FOR 120, 240, 277 YOLT, FIELD INSTALLED (NOT UL USTED)
F2 - DOUBLE FUSING FOR 208, 240 YOLT, FIELD INSTALLED (NOT UL USTED)
DTLPR12XX - PHOTOCONTROL FOR 120 YOLT, LOCATED IN ACCESS COVER, FIELD INSTALLED. NOT UL

DTLPR20/24/27XX - PHOTOCONTROL FOR 206/240/277 VOLT, LOCATED IN ACCESS COVER. FIELD

ACCESSORIES

INSTALLED, NOT UL LISTED.

GVBANDX - BAND ACCESSORY (FIELD INSTALLED)

THIS PRINT IS THE PROPERTY OF HOLOPHINE AND IS LOANED BUBLECT TO RETURN UPON DEMAND AND UPON EXPRESS CONDITION THAT IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRINENTAL TO OUR INTERESTS, AND ONLY BY CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE. HOLOPHANE
LEADER IN LIGHTING SOLUTIONS

An Sculty Brands Company
214 OAKWOOD AVENUE - NEWARK, OHIO 43055

SCALE: N/A DRAWN: RAF APP'D:

DATE: 08-06-02

DRAWING NO: US-2514

BURLINGTON Series

Cast Aluminum Posts







3" Dia. Smooth

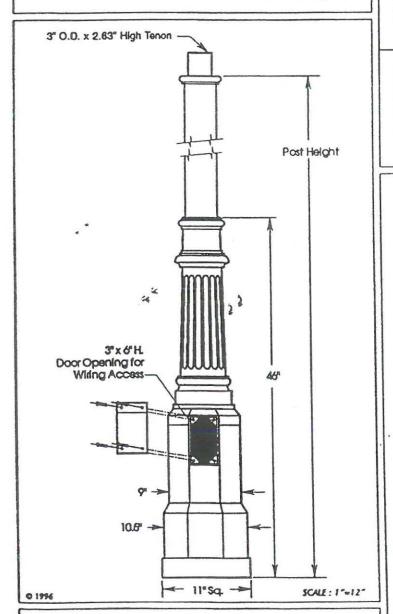
& Dla. Smooth





4 Dia Fluted

3"-4" Dia. Tapered



HOLOPHANE UNIQUE SOLUTIONS

515 McKinley Avenue • Newark, Ohio 43055 • (614) 349-4160 • Fax 1-800-346-5923

ORDERING GUIDE

sample catalog number

| BL1254/11 | | CA/BK | - | WPRT |
|--------------------------------------------------|---|------------------------|---|------------------------------------------------|
| Post | | ematerial/finish | | options |
| BURUNGTON 12' Smooth 4" shaft 11" sq. base | • | Cast Aluminum Black | • | Weatherproof Receptacle at Top (of post) |

| Post (check | appropriate boxes, add height in bla | ink) |
|-------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Catalog # | SPrint Type | Helahts |
| OBL_S3/11 OBL_S4/11 OBL_T4/11 | 3 dia. smooth 4 dia. smooth 4 dia. fluted 3 4 dia. tapered | 8', 10', 12' 8', 10', 12', 14' 8', 10', <u>12'</u> , 14' 8', 10', <u>12'</u> , 14' |

Material/Finish

Cotalog Suffix

G-CA/BK

G-CA/DG

G-CA/DG

G-CA/DB

G-CA/PP

G-CA/PP

Cast Aluminum/Dark Green

Cast Aluminum/Dark Bronze

Cast Aluminum/Prime Painted

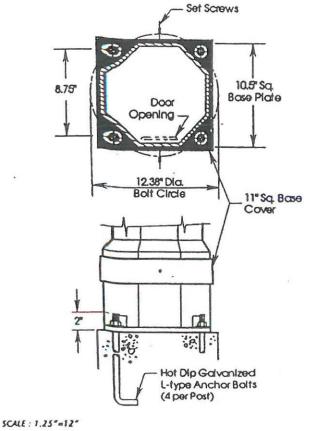
Cast Aluminum/Custom Color

(for complete finish and color opelions, see "Finish" section in catalog)

Optional Equipm ent

| Catalog Suffix | Description . |
|----------------------------|---------------------------------------------|
| OF RBIGFITURE | Receptades (see Accessories section) |
| 0- / | Banner Arms (see Accessories section) |
| Q | Flag Pole Holders (see Accessories section) |
| Q | Custom Logos (see Accessories section) |
| Q | Signage (see Signage section) |
| (for optional equipment no | of focused in catalog, consult factory) |

ANCHORAGE GUIDE



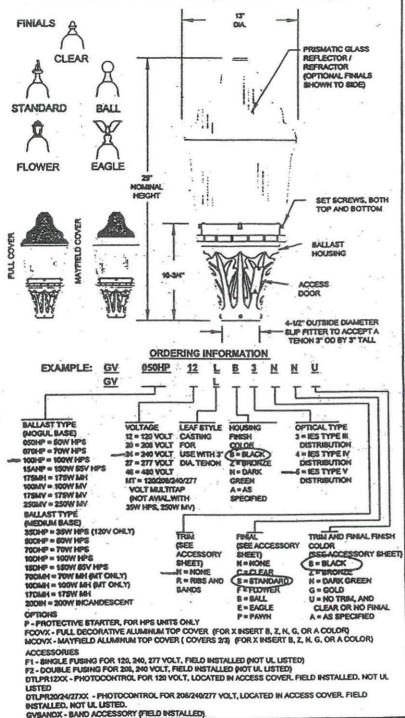
TYPE HI US-1604

1 11000

1

GRANVILLE®SERIES LUMINAIRE LEAF STYLE CASTING

MAXIMUM WEIGHT - 47 lbs. MAXIMUM EFFECTIVE PROJECTED AREA - 1.26 sq. ft.



Specifications

GENERAL DESCREPTION

The luminaire consesses of three main components, a ballast housing, a reflector witch socket, and a prismatic glass optical assembly.

OPTICAL ASSEMBLY

The optical assembly is a precisely molded thermal resistant borosilicate glass resilienctor and refractor with or without decorative finial. Time supper portion of this system incorporates a series of reflecting prisms that redirect over 50% of the upward Signit in to the controlling retractor while allowing a soft uplicability component to define the traditional acom shape of the surrelineire. Two decorative aluminum top covers are availables. The lower portion uses precisely molded refracting perisons to control the distribution of light to meximize utilization conformity, and luminaire spacing. Three unique optical assemblies are available, designed for IES type III, IV, and V lighting distributions.

BALLAST HOUSING

The ballast housing contains the ballast and other electrical components. The himousing is cast of 356 copper free aluminum alloy with a raised oak leaf pattern and is designed to flow gracefully from a 4" - 5" diameter decorative post Thee sulpfitter will accept a 3" high, 2-7/8" to 3-1/8" O.D. tenon seried is secured by four hex head stainless steel 1/4-20 x 1° seet screws. Four uniquely designed stainless steel spring clips enclosed in a clear polyvinyl chloride sleeve and actiusted by hex head stainless steel 1/4-20 bolts secureby cradle the optical assembly. The housing is finished with polyester powder paint applied after a seven stage pretreatment process to insure maximum durability.

RALLAST

(Refer to Ballast Data Sheet for specific operating characteristics)

35 - 100 watt 120 wolft High Pressure Sodium (HPS) ballasts are High Power Factor Reactor type. All other HPS ballasts are High Power Factor Autotransformer type. 175 watt Metal Halide (MH) ballasts are Peak Lead Autotransformer type. 70 and 100 watt MH units are available only with (120V, 208V, 240V, 277V) multitap High Power Factor High Reactance type ballast. All Mercury Vapor (IVIV) ballasts are High Power Factor Constant Wattage Autotransformer (CWA) type.

REFLECTOR / SO CKET ASSEMBLY

The reflector/sockest assembly is designed to position the specified light source at the light center of the refractor.

The luminaire is UL listed as suitable for wet locations at a maximum 40 degree C ambient temperature.

INSTALLATION

Refer to the instruction manual provided with each luminaire as to the specific method of wiring and mounting the huminaire

LAMP GV100HPQ)

ARCHITECTURAL OUTDOOR ORDER # 40

DRAWING NO: US-2514

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION F THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUPPLED, BUT ONLY ATTER APPROVAL BY THE CUSTOMER IN WRITING, ON POLE ORDERS AN ANCHOR BOLT TEMPLATE PRINT WILL SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED.

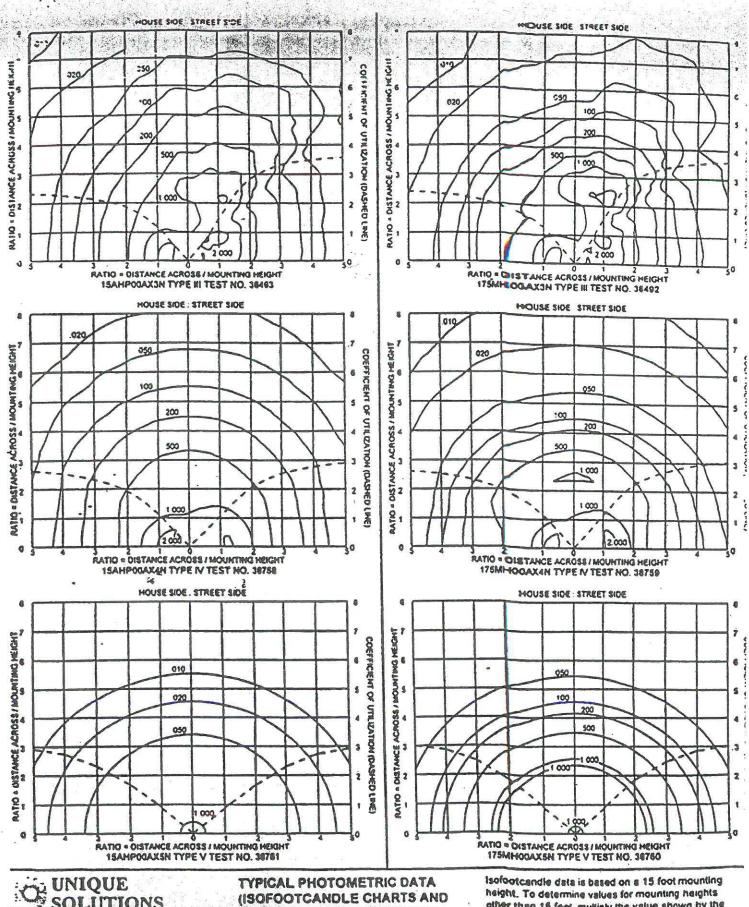
THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED BUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS CONDITION THAT IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL PURINSHED BY HOLOPHANE.

HOLOPHANE LEADER IN LIGHTING SOLUTIONS An Saculty Brands Company

214 OAKWOOD AVERUE - NEWARK, OHIO 43055

SCALE: N/A DRAWN: RAF APP'D:

DATE: 08-06-02



SOLUTIONS A DIVISION OF HOLOPHANE SIS MIKINLEY AVENUE

PO BOX 3006 1151-3673 NEWARK OHIO 43055

GOEFFICIENT OF UTILIZATION CURVES)

US-1089

other than 15 feet, multiply the value shown by the following factors:

14' - 1.15 12' - 1.56 10' - 2.25

18 - 0.69 20 - 0.56 16' - 0 88

22' - 0 46 24' - 0.39