
Berkeley Lab

Signage and Public Information Standards Manual

Volume 3: Specialty Signage

Version 2.0.1
1.25.00

Studio L'Image

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Volume 3: Specialty Signage & Graphics

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Preface

Standards

The signage system is in the process of being installed lab-wide. Materials, finishes, and colors will be required to match existing system components to a high degree of exactitude, subject to the approval of the design team. This document addresses the standards in detail. Any questions regarding colors, finishes, or fabrication details should be directed to the design team.

Art Creation

Vendors will be responsible for setting type to specifications provided. Design team will be responsible for providing artwork for maps, arrows, pictographs, logos and symbols used in the signage. Vendor should inform the design team of any format requirements or preferences.

Changes

The specifications in this document supercede all previous documents.

Design Team

Questions about the specifications in this document may be addressed to the design team:

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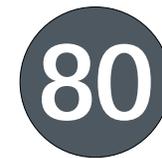
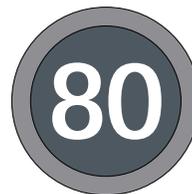
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Building Identification Signage

Building Identification

Scale 1:20



Identification
Primary Large
Module Type XA

Identification
Secondary Large
Module Type XB

Identification
Primary Small
Module Type XC

Identification
Secondary Small
Module Type XD

Building Entrance Identification

Scale 1:10



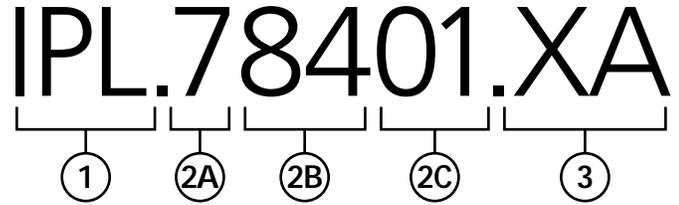
Identification
Primary Entrance
Module Type XE



Identification
Secondary Entrance
Module Type XF

Sign Unit Code

Each building identification sign unit is identified by a three-part code. The Sign Message Inventory list breaks out the code in the first three columns.



1. Function Code

Identifies functional type and hierarchy.

Major Categories

I = Identification

Hierarchy

P = Primary

S = Secondary

Detail Codes

L = Large

S = Small

Examples of use:

IPL = Identification Primary Large

IPS = Identification Primary Small

ISL = Identification Secondary Large

ISS = Identification Secondary Small

2. Sign Number

A 5-digit number uniquely identifies each individual sign.

2A. The first digit refers to the Exterior Signage Area (1–7) in which the building is located. See Appendix C for a map of the exterior signage areas.

2B. The next two digits identify the building number.

2C. The last two digits are the sign number.*

3. Module Type

The exterior system module types are designated XA, XB, and so on to distinguish them from the interior signage module letter series. Each module type defines a particular sign dimension and layout. Construction of each module type is described in section 2.05. Specifications common to all modules are covered elsewhere in section 2.00.

**NOTE: Building identification signs are numbered from #[building #]01 for each building. Alphabetic suffixes such as 90A are ignored for the purpose of enumeration.*

Sign Module Types

Building Identification Function Codes & Module Types

<i>Code</i>	<i>Description</i>	<i>Module Type</i>
IPL	Identification Primary Large	XA
ISL	Identification Secondary Large	XB
IPS	Identification Primary Small	XC
ISS	Identification Secondary Small	XD
IPE	Identification Primary Entrance	XE
ISE	Identification Secondary Entrance	XF

Color Code Description

Building Identification

Building Identification signs include modules XA, XB, XC, XD, XE, and XF. The common characteristic of these sign units is that they are all attached to buildings. Since buildings at the Lab are painted a variety of colors, it was determined that no single color scheme for these signs would be satisfactory in all applications. For this reason we have specified three different palettes, called Color Groups. Each building included in this project has been assigned a Color Group which is compatible with the existing architectural palette, and which is used for each sign attached to that building. Refer to section 2.07, Location-Specific Information, for the Color Group assignment of each building. The building affiliation of individual signs can be determined by referring to the Sign Number, as explained on page 2.02.01.

Color Code List

CODE	COLOR SPEC	FUNCTION
CG1	Color Group 1	Building Identification Color Group (blue-gray)
CG2	Color Group 2	Building Identification Color Group (earthtone-green)
CG3	Color Group 3	Building Identification Color Group (earthtone-brown)
1A	Plochere G129	Color Group 1 Base Color
1B	Plochere G133	Color Group 1 Accent Color
2A	Plochere G194	Color Group 2 Base Color
2B	Plochere G197	Color Group 2 Accent Color
3A	Plochere G26	Color Group 3 Base Color
3B	Plochere G29	Color Group 3 Accent Color
CG(#)	Color Group (as specified)	See Sign Message Inventory for individual sign color group assignment
(#)A	Base Color (as specified)	See Sign Message Inventory for individual sign color group assignment
(#)B	Accent Color (as specified)	See Sign Message Inventory for individual sign color group assignment
WH	White	Type color

The type family specified for all signs is Frutiger. Frutiger Roman is the standard weight used on many types of signs. Frutiger Bold is used for building numbers on building identification signs. Type size specifications for specific signs are given in the Module Description pages.

Frutiger Roman

abcdefghijklmnopqrstuvwxy
z
ABCDEFGHIJKLMN
OPQRSTUVWXYZ
1234567890.,:

Frutiger Bold

**abcdefghijklmnopqrstuvwxy
z
ABCDEFGHIJKLMN
OPQRSTUVWXYZ
1234567890.,:**

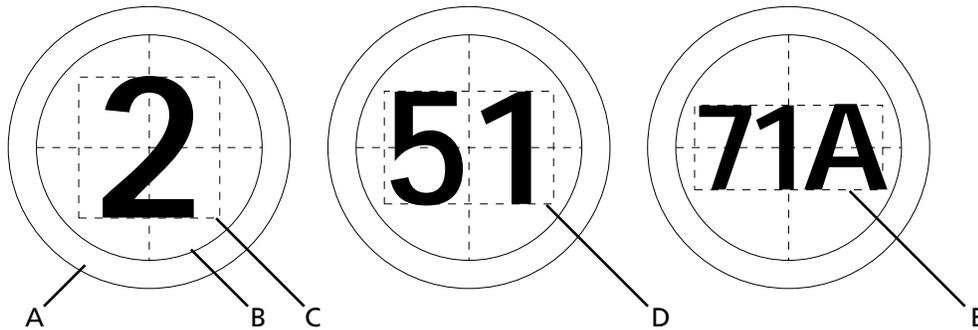
Module XA Identification Primary Large IPL.00000.XA

Primary building identification units are used on the side of the building on which is located the primary public entrance. Module XA is sized to be visible from longer distances and from moving vehicles. It consists of an Accent Circle to which is added a Number Circle. The Number Circle is identical to the number circle which composes the Identification Secondary Large unit, the XB module.



Module XA Construction

Scale 1:20



A. Accent Circle. 750mm dia. x 1/8" aluminum disk.
Color: (#)B.

B. Number Circle. 600mm dia. x 1/8" aluminum disk.
Color: (#)A.

C. Type Zone, 1-digit. 375 x 375mm. Center vertical &
horizontal. Type Color: WH

D. Type Zone, 2-digit. 450 x 300mm. Center vertical &
horizontal. Type Color: WH

E. Type Zone, 3-digit. 500 x 225mm. Center vertical &
horizontal. Type Color: WH

NOTE: Type Height is calculated for the numeral "1".
Numerals composed of curves such as "8" will slightly
exceed the nominal measurement. Certain number
combinations will need to be visually centered, and the
space between the characters may require adjustment.

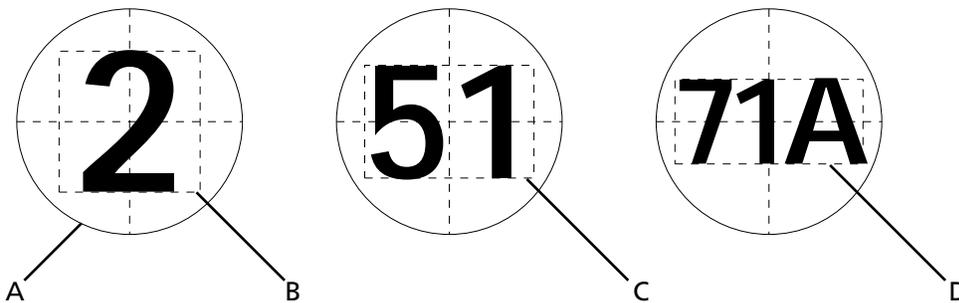
Module XB
Identification Secondary Large
ISL.00000.XB

Secondary building identification units are used on those sides of buildings which do not contain the primary public entrance. Module XB is sized to be visible from longer distances and from moving vehicles. It consists of a Number Circle only. This unit is identical to the Number Circle portion of the Identification Primary Large unit, the XA module.



Module XB Construction

Scale 1:20



Module XB is identical to Module XA with the Accent Circle deleted.

A. Number Circle. 600mm dia. x 1/8" aluminum disk.

Color: (#)A.

B. Type Zone, 1-digit. 375 x 375mm. Center vertical & horizontal. Type Color: WH

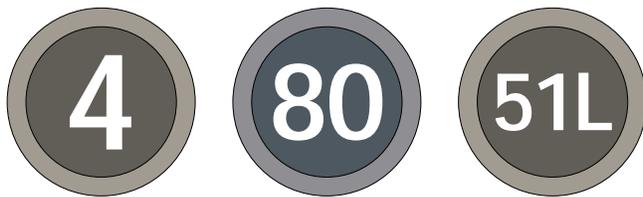
C. Type Zone, 2-digit. 450 x 300mm. Center vertical & horizontal. Type Color: WH

D. Type Zone, 3-digit. 500 x 225mm. Center vertical & horizontal. Type Color: WH

NOTE: Type Height is calculated for the numeral "1". Numerals composed of curves such as "8" will slightly exceed the nominal measurement. Certain number combinations will need to be visually centered, and the space between the characters may require adjustment.

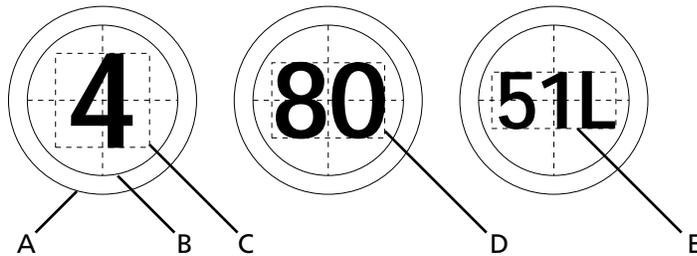
Module XC Identification Primary Small IPS.00000.XC

Primary building identification units are used on the side of the building on which is located the primary public entrance. Module XC is sized for shorter viewing distances and for smaller buildings. It consists of an Accent Circle to which is added a Number Circle. The Number Circle is identical to the number circle which composes the Identification Secondary Small unit, the XD module.



Module XC Construction

Scale 1:20



A. Accent Circle. 500mm dia. x 1/8" aluminum disk.

Color: (#)B.

B. Number Circle. 400mm dia. x 1/8" aluminum disk.

Color: (#)A.

C. Type Zone, 1-digit. 250 x 250mm. Center vertical & horizontal. Type Color: WH

D. Type Zone, 2-digit. 300 x 200mm. Center vertical & horizontal. Type Color: WH

E. Type Zone, 3-digit. 330 x 150mm. Center vertical & horizontal. Type Color: WH

NOTE: Type Height is calculated for the numeral "1". Numerals composed of curves such as "8" will slightly exceed the nominal measurement. Certain number combinations will need to be visually centered, and the space between the characters may require adjustment.

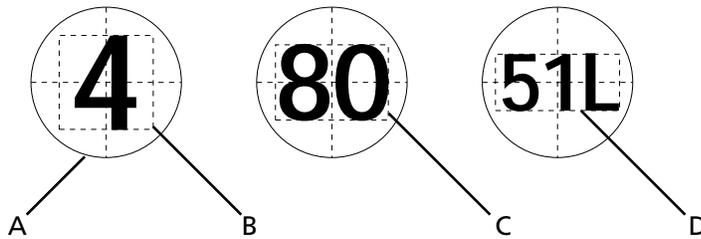
Module XD
Identification Secondary Small
ISS.00000.XD

Secondary building identification units are used on those sides of buildings which do not contain the primary public entrance. Module XD is sized for shorter viewing distances and for smaller buildings. It consists of a Number Circle only. This unit is identical to the Number Circle portion of the Identification Primary Small unit, the XC module.



Module XD Construction

Scale 1:20



Module XD is identical to Module XC with the Accent Circle deleted.

A. Number Circle. 400mm dia. x 1/8" aluminum disk.
Color: (#)A.

B. Type Zone, 1-digit. 250 x 250mm. Center vertical & horizontal. Type Color: WH

C. Type Zone, 2-digit. 300 x 200mm. Center vertical & horizontal. Type Color: WH

D. Type Zone, 3-digit. 330 x 150mm. Center vertical & horizontal. Type Color: WH

NOTE: Type Height is calculated for the numeral "1". Numerals composed of curves such as "8" will slightly exceed the nominal measurement. Certain number combinations will need to be visually centered, and the space between the characters may require adjustment.

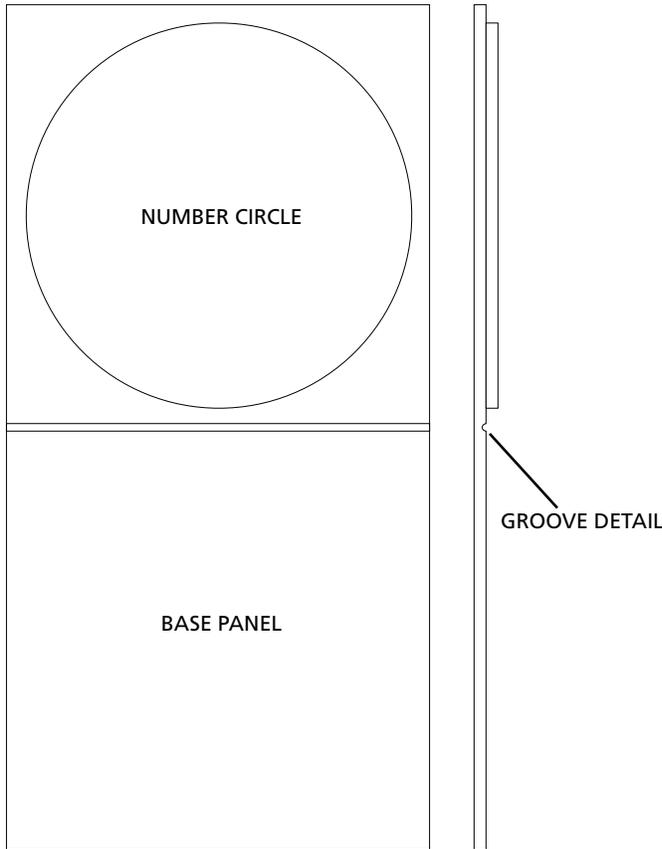
Module XE
Identification Primary Entrance
IPE.00000.XE

Module XE is used to identify building entrances which are designated the primary public entrance. It consists of a Base Panel to which is added a raised Number Circle.



Module XE Construction

Scale 1:4



IPE.00000.XE

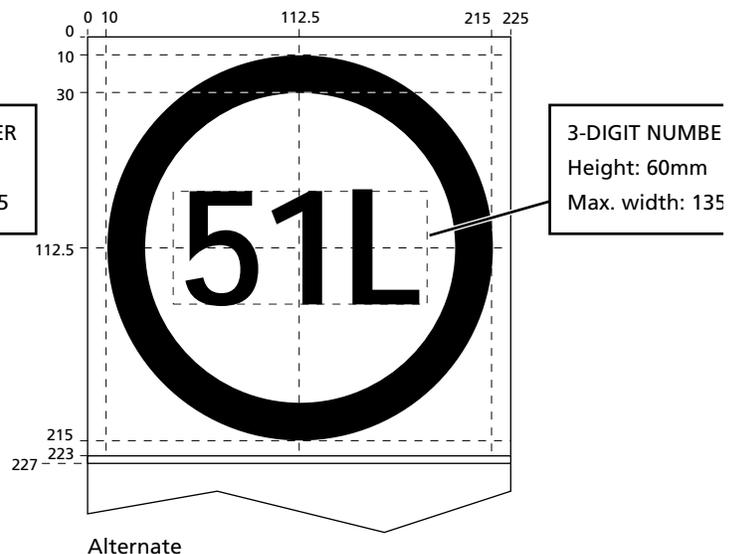
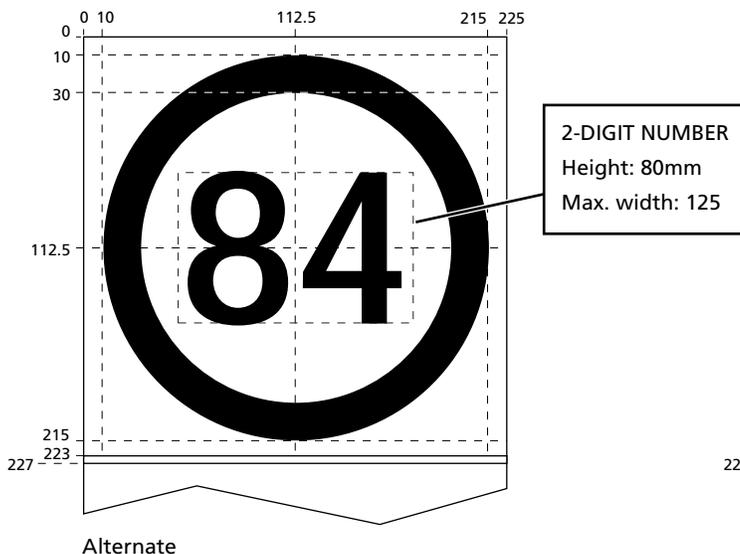
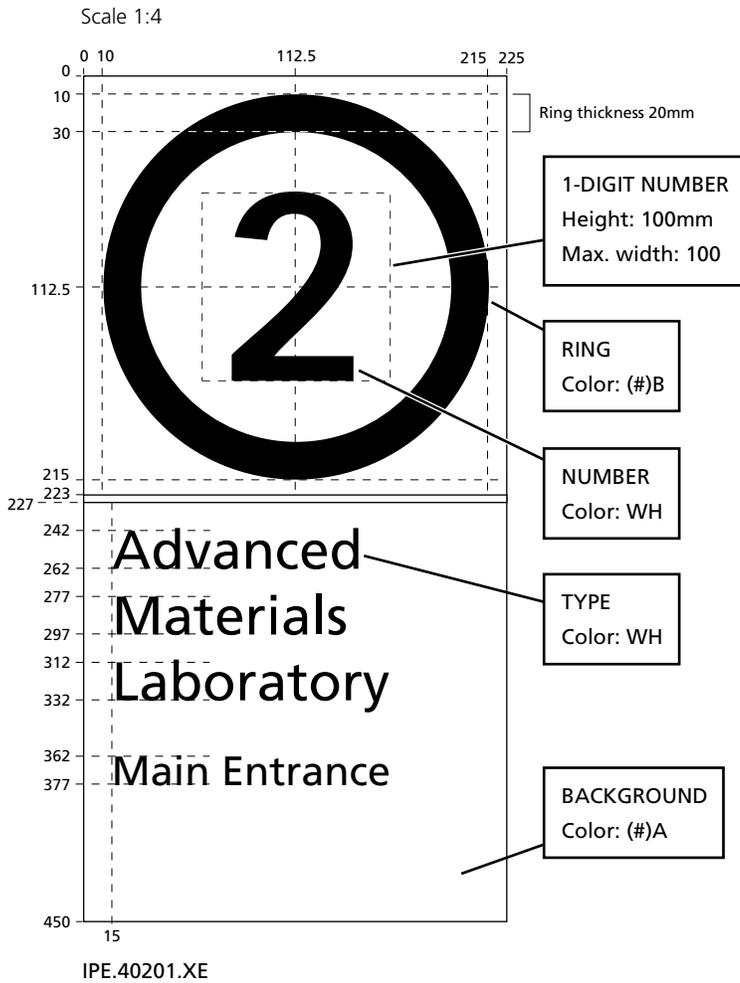
Module IPE.XE Dimensions

PANEL	W x H (mm)	MATERIAL	DETAIL	STATUS
Base Panel	225 x 450	1/4" acrylic		Permanent
Number Circle	205 x 205	1/4" acrylic		Permanent
Groove Detail	225 x 4	Router groove	Half-round	Permanent

Note on materials:

Vendor may recommend durable, attractive construction alternatives appropriate for exterior use. Possibilities include: powder-coated steel, polyurethane-painted aluminum, subsurface-printed acrylic and polycarbonate.

Module XE Graphic Specifications



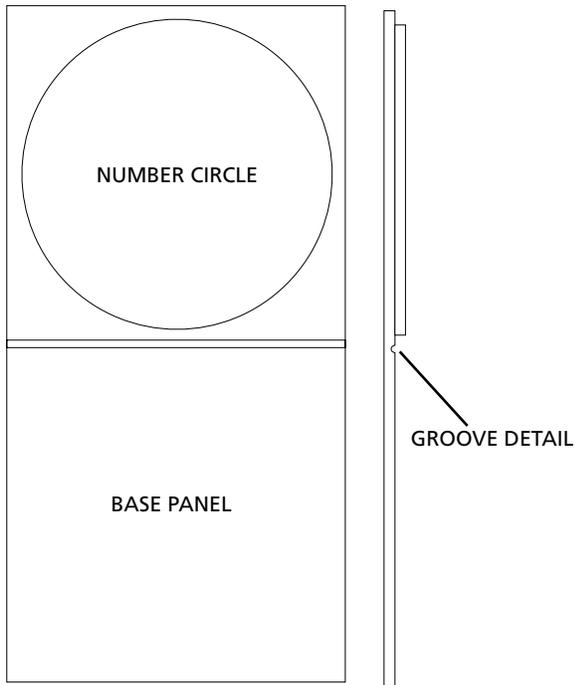
Module XF Identification Secondary Entrance ISE.00000.XF

Module XF is used to identify building entrances which are not the primary public entrance. It consists of a Base Panel to which is added a raised Number Circle.



Module XF Construction

Scale 1:4



ISE.00000.XF

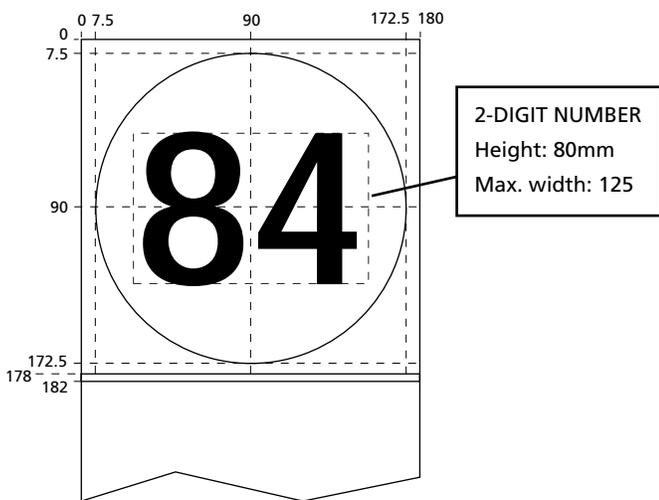
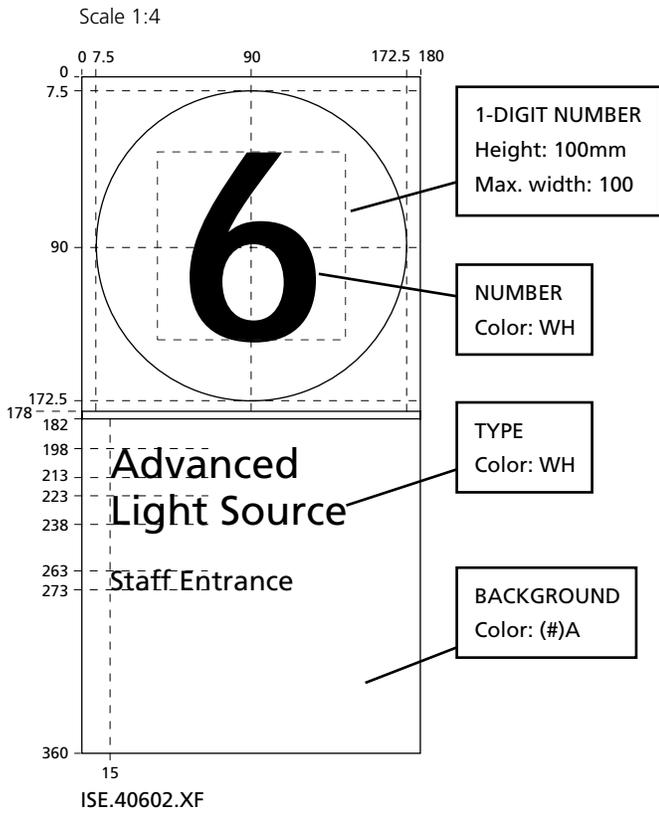
Module ISE.XF Dimensions

PANEL	W x H (mm)	MATERIAL	DETAIL	STATUS
Base Panel	180 x 360	1/4" acrylic		Permanent
Number Circle	165 x 165	1/4" acrylic		Permanent
Groove Detail	210 x 4	Router groove	Half-round	Permanent

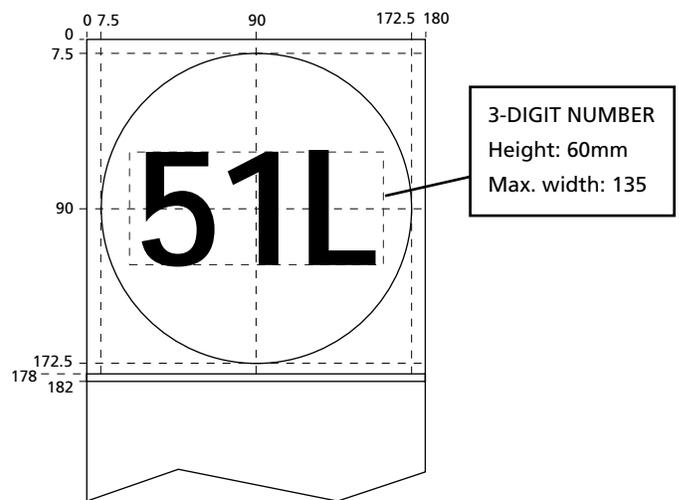
Note on materials:

Vendor may recommend durable, attractive construction alternatives appropriate for exterior use. Possibilities include: powder-coated steel, polyurethane-painted aluminum, subsurface-printed acrylic and polycarbonate.

Module XF
Graphic Specifications



Alternate

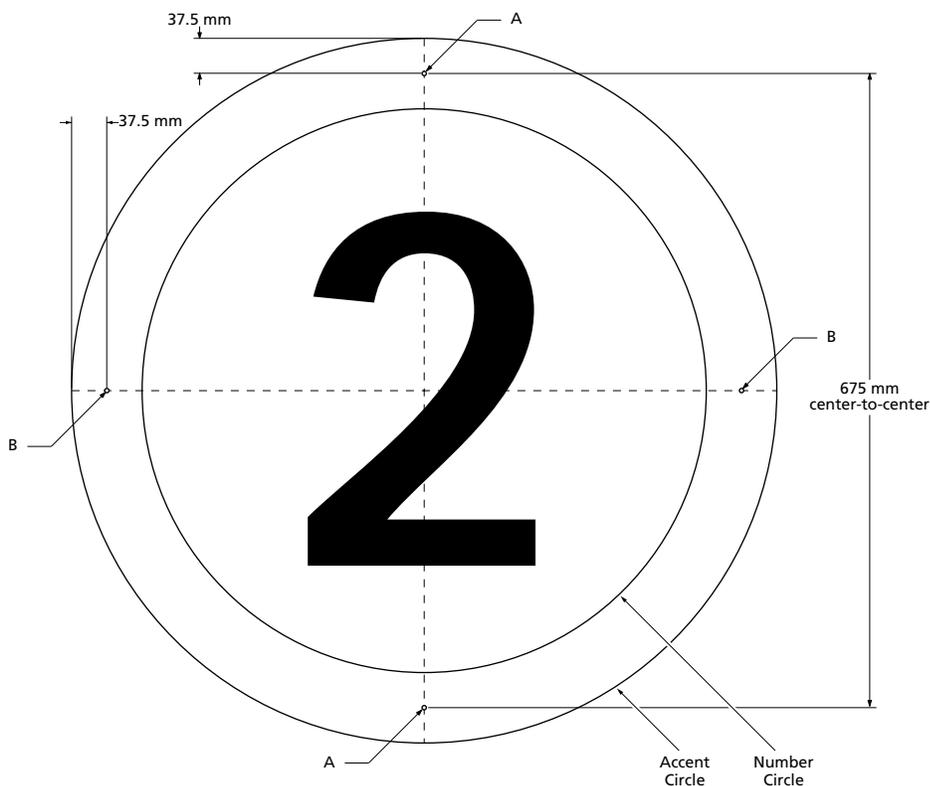


Alternate

XA Mounting Layout

Only two mounting holes for fasteners should be drilled per sign unit, at the locations marked "A", or at the locations marked "B", depending on the individual circumstances. Location set A is preferred, and should be used in all cases unless contraindicated. For consistent alignment, holes should be pre-marked with a template at the shop rather than marked and drilled at the installation site. All fastener heads should be painted to match the background color; in this case the color of the accent circle.

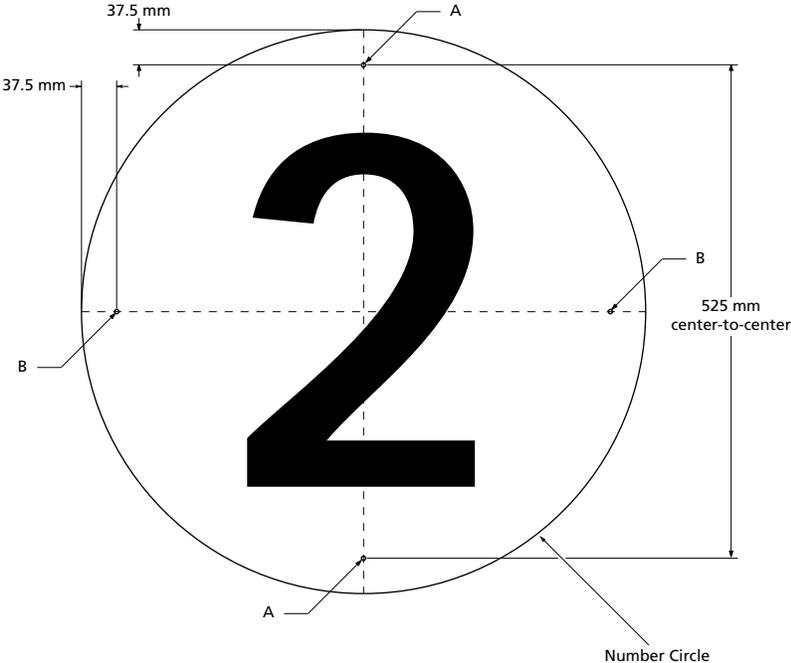
Scale 1:8



XB Mounting Layout

Only two mounting holes for fasteners should be drilled per sign unit, at the locations marked "A", or at the locations marked "B", depending on the individual circumstances. Location set A is preferred, and should be used in all cases unless contraindicated. For consistent alignment, holes should be pre-marked with a template at the shop rather than marked and drilled at the installation site. All fastener heads should be painted to match the background color; in this case the color of the number circle.

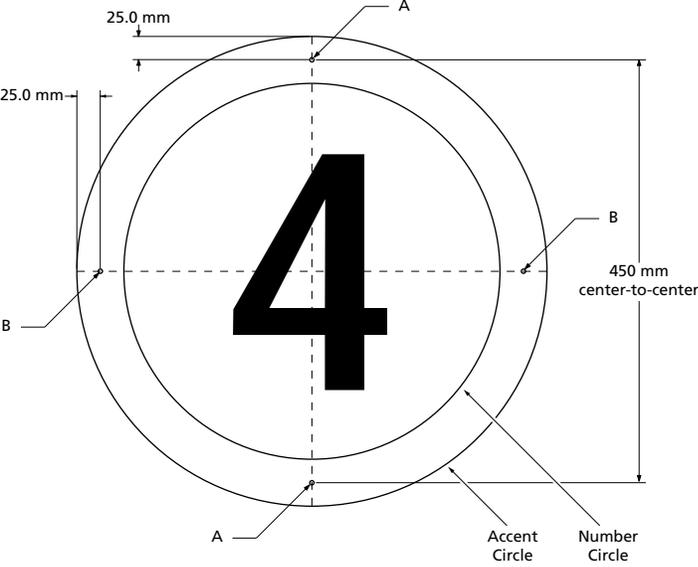
Scale 1:8



XC Mounting Layout

Only two mounting holes for fasteners should be drilled per sign unit, at the locations marked "A", or at the locations marked "B", depending on the individual circumstances. Location set A is preferred, and should be used in all cases unless contraindicated. For consistent alignment, holes should be pre-marked with a template at the shop rather than marked and drilled at the installation site. All fastener heads should be painted to match the background color; in this case the color of the accent circle.

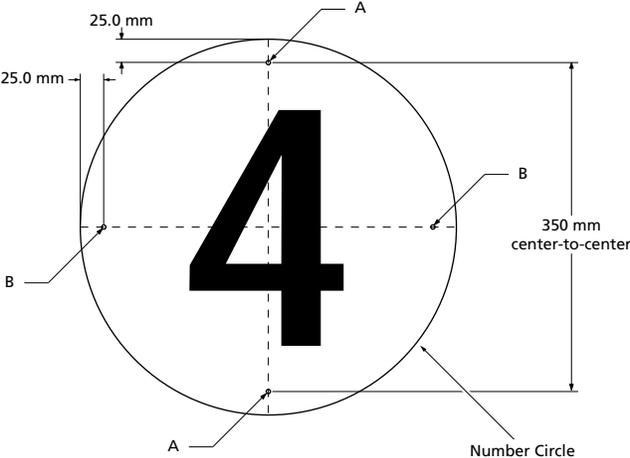
Scale 1:8



XD Mounting Layout

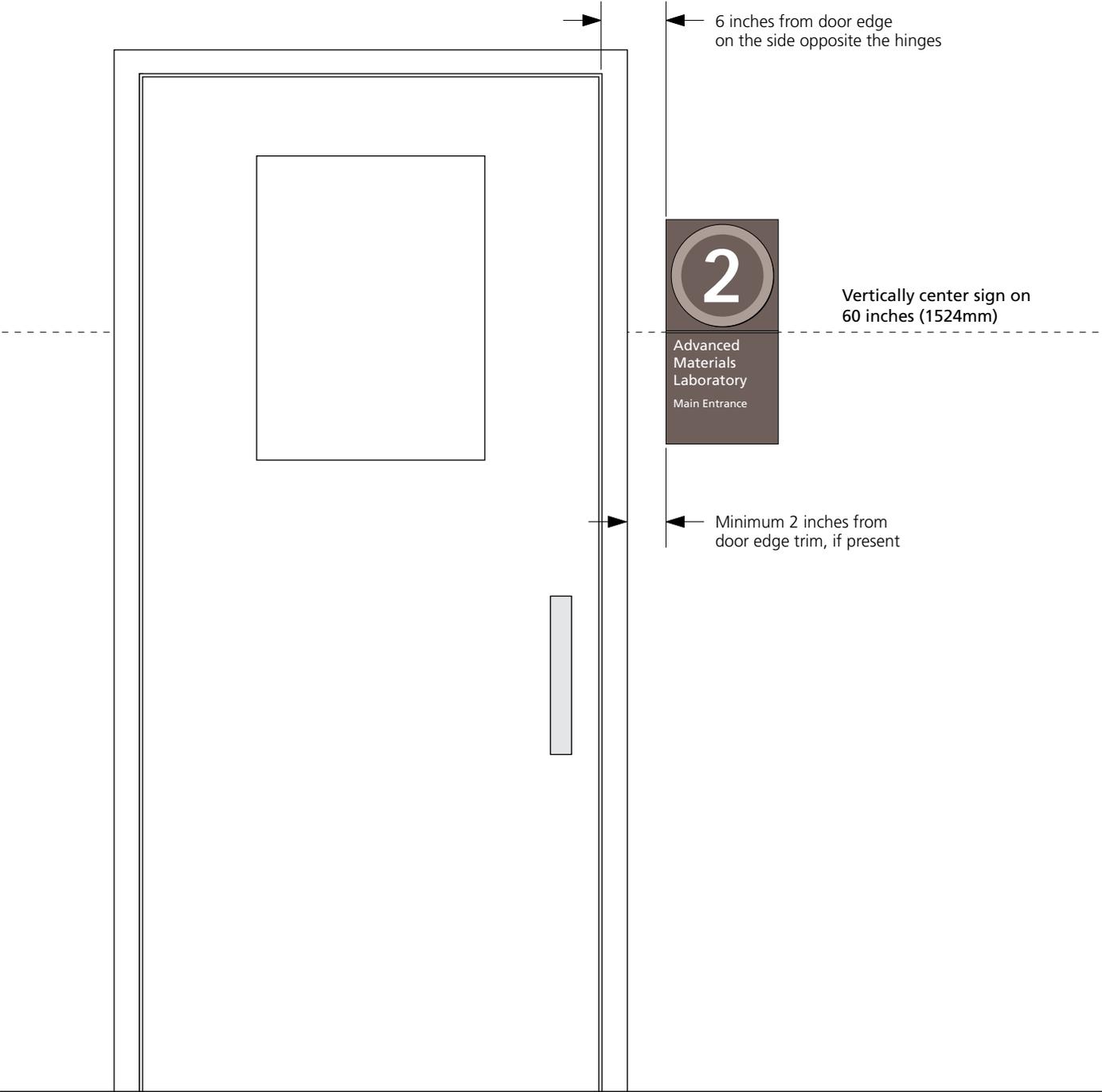
Only two mounting holes for fasteners should be drilled per sign unit, at the locations marked "A", or at the locations marked "B", depending on the individual circumstances. Location set A is preferred, and should be used in all cases unless contraindicated. For consistent alignment, holes should be pre-marked with a template at the shop rather than marked and drilled at the installation site. All fastener heads should be painted to match the background color; in this case the color of the number circle.

Scale 1:8



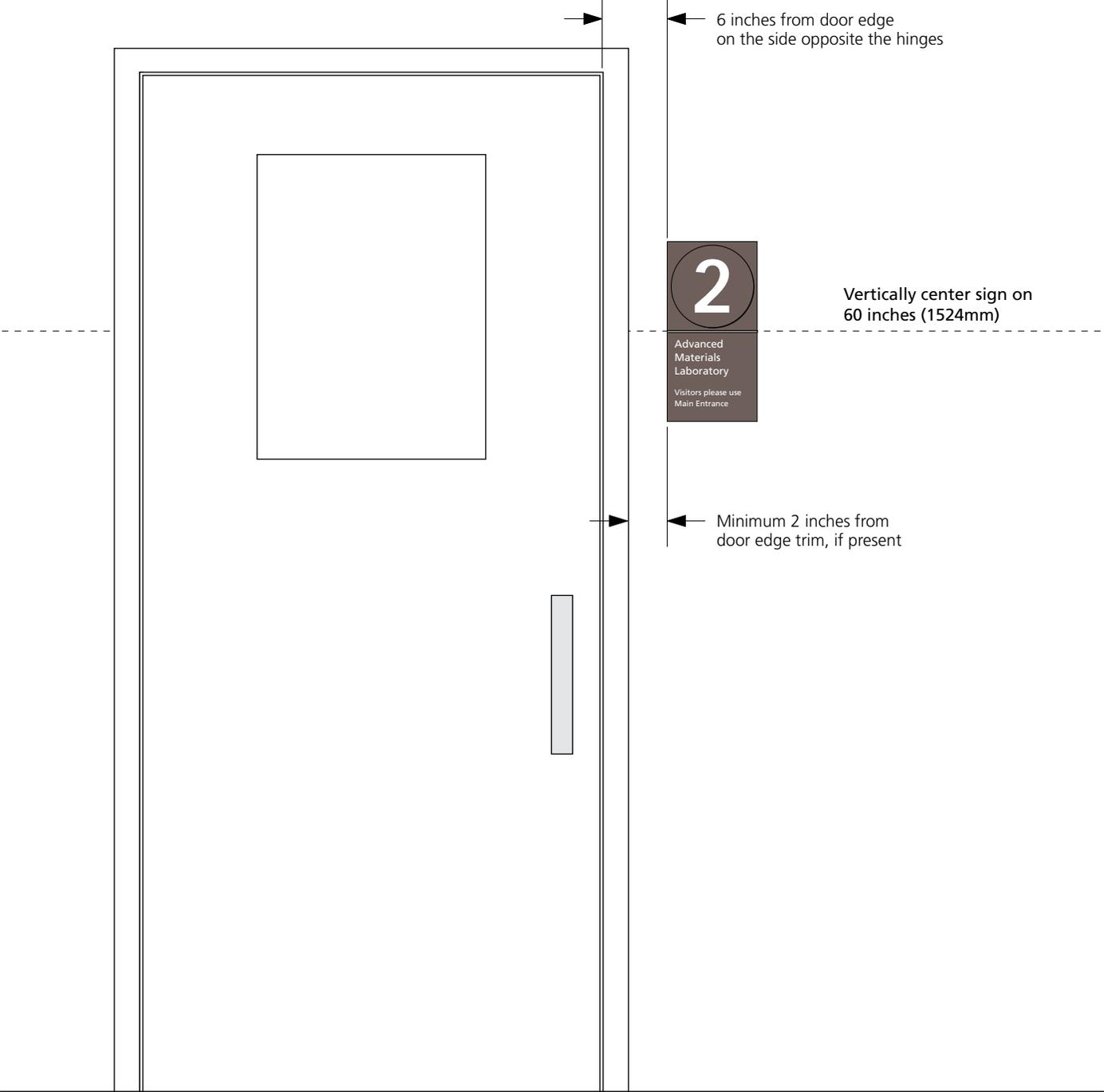
Module XE Mounting Layout

Elevation
Scale 1:12



Module XF Mounting Layout

Elevation
Scale 1:12



Color Group Assignments
By Building Number

Building Number	Color Group	Building Number	Color Group	Building Number	Color Group
2	3	51	2	72	1
4	2	51 L	2	73	3
5	2	52	2	74	2
6	1	53	3	75	2
7	2	54	3	75 A	2
10	1	55	1	75 B	3
14	3	55 A	3	75 E	3
16	2	55 C	3	76	2
17	2	56	2	76 K	2
25	2	58	3	76 L	2
26	1	60	1	77	2
27	3	62	3	77 A	2
29	3	62 A	3	78	2
29 A	3	63	3	79	1
29 B	3	64	1	80	1
29 C	3	65	1	80 A	1
31	3	65 A	3	81	3
34	2	65 B	3	82	1
35	1	66	1	83	3
37	2	67 B	3	83 A	3
40	2	67 C	3	84	1
41	2	69	2	85	1
43	3	70	2	85 A	1
44 A	2	70 A	2	85 B	2
44 B	2	71	1	88	3
44	3	71 A	3	90	3
45	2	71 B	2	90 B	3
46	3	71 C	3	90 C	3
46 A	3	71 D	3	90 F	3
46 B	3	71 E	3	90 G	3
46 C	3	71 F	3	90 H	3
46 D	3	71 H	3	90 J	3
47	3	71 J	3	90 K	3
48	2	71 K	3	90 P	3
50	2	71 P	3		

Off-Site Building Identification

Off-Site Buildings

Background

The requirements of identification signage for off-site buildings are considerably more complex than for buildings on the Berkeley Lab campus. The standard Building Identification signs, include modules XA, XB, XC, and XD, are specifically designed for use on-site. Their primary function is to distinguish the various lab buildings by prominent display of the building number. Out of this context, the size, content, and appearance of these modules is not appropriate.

Off-site building identification signage requires a different approach. For one thing, the building number has little relevance in this context. The building name or title assumes the major role in distinguishing the facility from other off-site locations. Furthermore, the signage carries the additional burden of identifying the facility as part of Berkeley Lab, which would not otherwise be apparent. Finally, the street address of the building becomes an important wayfinding factor, which must not be obscured.

Above all, due to its location in the public eye, off-site building signage must be carefully designed so as to enhance the image of Berkeley Lab. In this respect, it is tightly linked to the physical appearance of the building, which is not a major factor in the on-site system. The signage and the architecture must work together to convey an appropriate image.

Suburban vs Urban Sites

Suburban settings such as office parks may require a different approach than urban locations such as multistory office buildings. In office parks, signage is generally separate from the building structure, and may be subject to pre-existing standards set by the developer or architect. At this time, no examples of this type of signage have been developed.

In urban areas, signage is usually applied to the facade of the building, and may be severely constrained in size,

structure, or materials due to physical or aesthetic requirements of the site. In either case, certain conventions must be followed in order to assure appropriate use of the Berkeley Lab identity and clear communication of the building title or function.

The ensuing discussion is broadly applicable to either location possibility; but, for the most part, assumes an urban site and signage directly applied to the building.

Lab Identity

There are many variations of the official lab identity in current use. The preferred terminology for signage use is “Berkeley Lab”, as opposed to the full, formal name “Ernest Orlando Lawrence Berkeley National Laboratory”. Because of scale and readability issues, the ‘dome and tower’ logo should not be used as the primary identity element. Rather, the convention calls for the phrase “Berkeley Lab” to form the first part of the complete building title, as in this hypothetical example: *Berkeley lab Emeryville Storage Facility*. This construction enables a unified typographic treatment for the entire message.

The simplicity of this solution, in turn, enables it to be adapted to any architectural context, using appropriate layout and materials. Such flexibility would not be the case were the convention to dictate a particular size, color, location, or typographic treatment, as might be expected in a commercial franchise operation. Some preferred treatments are discussed in the following paragraphs.

Building Title

As stated above, the full building title includes the phrase “Berkeley Lab”. The title should be located on the building so that it reinforces the main entrance, either being centered directly above or immediately adjacent. The entire title should be set in letters of the same size, on a single line, if at all possible. The size of the letters should be appropriate for the projected viewing distance.

(continued)

Off-Site Buildings

The typestyle, finish, materials and construction of the sign should be carefully chosen with consideration of the building architecture. There is no requirement that these details be consistent from building to building; rather, each installation should be optimized to the local context.

Recommendations

Certain materials and finishes are considered more appropriate insofar as enhancing the image of Berkeley Lab. These may include raised metal letters, and carved or cast letters in stone or concrete. Inappropriate materials include neon, illuminated plastic letters, sandblasted redwood, adhesive vinyl lettering, or lettering painted directly on the building.

The recommended typestyles for three-dimensional letters are the 'geometric' sans serif families. Some specific examples are Avenir Medium, Avenir Heavy, Futura Regular, Futura Heavy, and Twentieth Century Medium, depending on the relative weight required. These typefaces are chosen because their simple, bold construction makes them sculpturally appealing while remaining highly readable. Other sans serif typefaces, such as the popular Helvetica, or Frutiger, used in on-site signage, have more complex letterforms which do not translate well into three dimensions. Serif typefaces, such as Times Roman or Garamond, do not convey the proper image of the lab, and are not complementary to modern architecture. Finally, the typeface used in the Berkeley Lab logo, Bank Gothic, is not recommended for much the same reasons that the logo was not recommended for the primary identification element — the extended letterforms are difficult to read and take up a great deal of space relative to their height.

Address (Street Number)

After the building title, the street number should be the most prominent piece of information. Generally placed directly above the main entrance door, often on a transom window, it should be styled to harmonize with the

title treatment, and not left as an afterthought. In some installations it may be placed on an awning or other existing structure for better visibility. In a formal environment, the entire address may be spelled out, as in "415 20th Street". When placed on a window, vinyl lettering is an appropriate material; otherwise, similar treatments to the title signage should be considered.

Building Number

Off-site buildings are identified with a three-digit number, usually beginning with "9". Although this is not a primary means of identifying these facilities, this information should be available to users and visitors. The recommended convention is that it be placed next to the entrance, in a size and layout consistent with the on-site standard XE module, and display the building number in a circle, and the building title. The actual details may vary according to the installation; for instance, sometimes the information may be placed directly on a window in adhesive vinyl lettering, instead of on a separate sign unit.

Off-Site Buildings and Facilities

The application of the Berkeley Lab identity to off-site buildings requires a careful examination of multiple factors. One of these is the public name of the facility. The following considerations are put forward as guidelines for the development of building names, with the anticipation that if thoughtfully executed they will assure clear communication, and bring increased visibility and awareness to the laboratory.

It might be asked whether a building name is even necessary. Conceivably, the off-site facility could merely display some variant of the Berkeley Lab identity, and not a specific building name. Aside from the obvious utility of having a unique, shared means of referring to the facility among lab personnel, it is also important to present a clear image to the public. An inappropriate over-emphasis on the Berkeley Lab identity in a particularly public location could even result in confusion with the main laboratory campus, the location of which is not well understood by the public at large.

Lab Identity

Given that off-site facilities should be clearly identified as belonging to Berkeley Lab, the following paragraph discusses some of the possibilities for implementing this requirement, in light of the previous conclusions.

There are several versions of the lab identity, which theoretically could be applied singly or in combination. The 'dome and tower' logo includes the phrase "Berkeley Lab", albeit in a format which renders the relative size of the message unfortunately diminutive for architectural signage purposes. A variation combines this logo with the full formal name "Ernest Orlando Lawrence Berkeley National Laboratory" — to which the same objection applies. Simply spelling out the full name in appropriately-sized lettering seems likely to run up against space constraints in most conceivable layouts. Finally, the 'bar' variant of the logo, with just the words "Berkeley Lab" in a rectangle, turns out to be awkward to combine with a building name in actual practice.

All things considered, the recommendation is that the name of the facility be preceded by the phrase "Berkeley Lab" as part of its official title, as in this example: *Berkeley Lab Oakland Facility*. The building identification signage would consist of this entire title.

Building Name

The part of the official title that does not consist of the phrase "Berkeley Lab" is here referred to as the building name. The purpose of these guidelines is to simplify the process of coining names for new off-site facilities. Although at first glance this process may not seem all that difficult, in practice it is full of potential pitfalls. An ideal name should be short, simple, and easy to remember. It should be readily identifiable with the facility it purports to describe, and it should be specific enough not to equally well describe some other facility. The name should be unique, and not easily confused with some similar name. Finally, the name should make sense to a casual visitor or passer-by, in the context of the location; for this reason, it should not actually include the words "off-site".

It may not be possible to develop a rigid formula that will automatically create an appropriate name in every instance. Nevertheless, a survey of potential naming components will serve to demonstrate the strengths and weaknesses of various approaches.

For the purposes of this discussion, the entire building title is represented by this diagram:

"Berkeley Lab" (lab identity) + [building name]

The building name itself may be deconstructed in this manner:

[modifier(s)] + [descriptor]

The modifiers may be further categorized as location modifiers or function modifiers. Finally, there may be other, unrelated solutions for certain facilities.

(continued)

Off-Site Buildings and Facilities

Location Modifiers

A location modifier can give useful information in identifying off-site facilities. The most obvious example of a location modifier would be the city in which the facility is located, as in *Oakland Building* or *Emeryville Facility*. This scheme reveals a weakness, however, when two or more facilities are located in the same community. At this point a function modifier may be added, or a more specific location identified, such as the street (*University Avenue Annex*); or a more generic or relative location modifier used, as in *Downtown Center* or *West Oakland Facility*. It should be noted that the use of the city name for facilities located in Berkeley results in undesirable redundancy: *Berkeley Lab Berkeley Facility*.

Function Modifier

As noted, a function modifier can be used to differentiate separate facilities in the same community, for example *Oakland Computing Facility* and *Oakland Storage Facility*. It could also be used alone, as in the case of city of Berkeley locations (*Berkeley Lab Shipping Facility*). However, some locations might have no specific function, or a combination of different functions. It is even conceivable that two such locations might be in the same community.

For example, another office structure in Berkeley might be leased for a similar purpose to Building 937. In this situation, a rigid naming formula such as:

[city name] + [function] + [descriptor]

would break down. It is recommended that a functional modifier be employed only for specific concepts such as *Computing*, *Shipping* or *Research*, as opposed to generic terms such as *Administrative* or *Support*.

Descriptor

The descriptor used must be appropriate to the type of facility. It should also create a euphonious combination with the associated modifiers. While the descriptors used may vary, it is possible that certain forms will be preferred to others. In general, it would not be wise to rely upon

the descriptor alone to differentiate separate facilities, as in the case of *Berkeley Lab Administrative Facility* and *Berkeley Lab Administrative Center*, this would seem sure to cause confusion. Possible descriptors include *Annex*, *Building*, *Center*, *Facility*, *Institute*, *Laboratory*, *Location*, *Office* and *Site*.

Other Solutions

It is possible that the street address could become the primary name, as in *500 Shattuck Center*. This formula is frequently used in commercial real estate, and could be appropriate in cases where Berkeley Lab occupies the entire building, and the building itself is well known. Sometimes the building may have a pre-existing name of its own, which is already in widespread use, such as *Promenade Building*. *Berkeley Tower* is another example.

In the past, an approach has been taken which uses unique names, such as *Calvin Laboratory* or *Joint Genome Institute*, although these names refer to particular permanent facilities, and not just to their locations, and thus are not strictly analogous to the ones currently being implemented. However, some consideration could be given to unique naming of planned long-term off-site locations.

Recommendations

The building name should be the shortest (or simplest) unique combination, using a location modifier or a function modifier, plus a descriptor, that adequately describes the facility. Occasionally both a location and a function may need to be included. An acceptable alternative is to use all or part of the existing building name, given that it meets the requirements of uniqueness and appropriateness. Using these guidelines, the names for two current off-site locations might be:

415 20th Street, Oakland (Building 943):

Berkeley Lab Oakland Facility

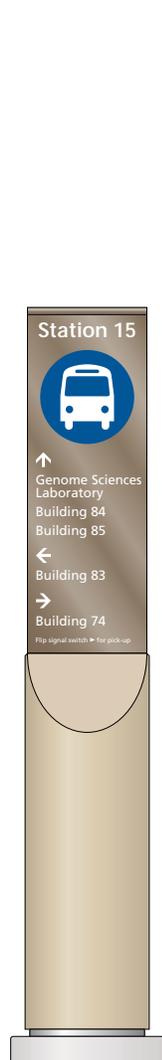
2120 University Avenue, Berkeley (Building 937):

Berkeley Lab Tower Offices

Shuttle System Signage and Graphics

On-Site Shuttle Signage

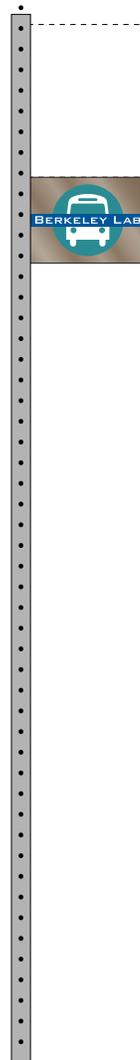
Scale 1:20



Identification
Primary Bus
Code: IPB
Module Type: XG

Off-Site Shuttle Signage

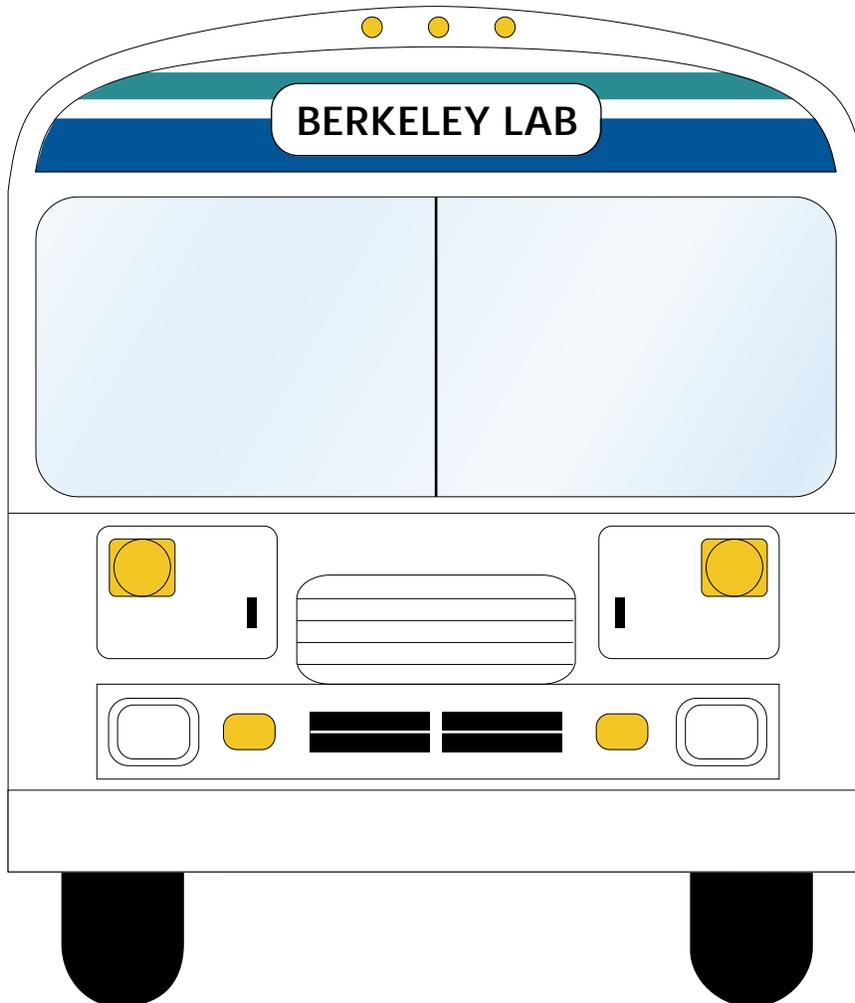
Scale 1:20



Identification
Secondary Bus
Code: ISB
Module Type: XI

Shuttle Bus Graphics

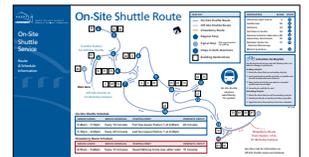
Scale 1:20



Route Map

Scale 1:10

On-Site



Off-Site



Sign Unit Code

Each shuttle system sign unit is identified by a three-part code. The Sign Message Inventory list breaks out the code in the first three columns.

1. Function Code

Identifies functional type and hierarchy.

Major Categories

I = Identification

Hierarchy

P = Primary

S = Secondary

Detail Codes

B = Bus

Examples of use:

IPB = Identification Primary Bus

ISB = Identification Secondary Bus

2. Sign Number

A 5-digit number uniquely identifies each individual sign.

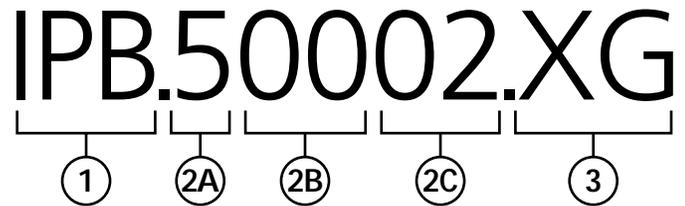
2A. The first digit refers to the Exterior Signage Area (1–7) in which the building is located. See Appendix C for a map of the exterior signage areas. The digit “0” indicates an off-site location.

2B. The next two digits identify the building number, for signs attached to buildings. The shuttle system signs have the digits “00” in this position.

2C. The last two digits are the sign number.

3. Module Type

The shuttle system sign module types are XG and XI. Each module type defines a particular sign dimension and layout. Construction of each module type is described in section 4.05. Specifications common to all modules are covered elsewhere in section 4.00.



Sign Module Types

Shuttle System Function Codes & Module Types

<i>Code</i>	<i>Description</i>	<i>Module Type</i>
IPB	Identification Primary Bus	XG
ISB	Identification Secondary Bus	XI

Color Code Description

Color Convention

The Shuttle System utilizes the Berkeley Lab identity colors (blue and teal) to differentiate On-Site and Off-Site routes. This scheme is consistently applied to signage, bus graphics, and printed materials (route maps and schedules). Other colors are used in the Bus Graphics and the Route Map Handout to indicate specific routes, but are not used in signage. The sign background colors are unique to the shuttle system, and are different than those used in other exterior signage. A list of the colors used in Shuttle System signage and bus graphics is given on page 4.03.02. Colors used in print materials such as the route map handout are specified in the art for that particular piece.

Color Code List

CODE	COLOR SPEC	FUNCTION
C01	Matthews 41-312 Medium Bronze	Sign background
C02	Matthews 47C-2T Riviera Sand	Pedestal color
C03	Pantone 653 CV Blue	On-Site Shuttle color
C05	Pantone 6453 CV Teal	Off-Site Shuttle color
C06	Pantone 194 CV Maroon	Strawberry Route Shuttle color
C07	Pantone 872 CV Old Gold Metallic*	Special Tour color
WH	White	Type color

* or stock vinyl equivalent

Typography

The type family specified for all signs is Frutiger. Frutiger Roman is the standard weight used on all modules. Frutiger Bold is used for building numbers on directional and identification signs. Type size specifications for specific signs are given in the Module Description pages.

Frutiger Roman

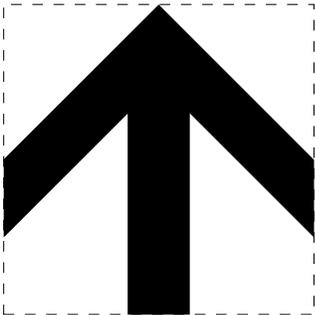
abcdefghijklmnopqrstuvwxy
z
ABCDEFGHIJKLMN
OPQRSTUVWXYZ
1234567890.,:

Frutiger Bold

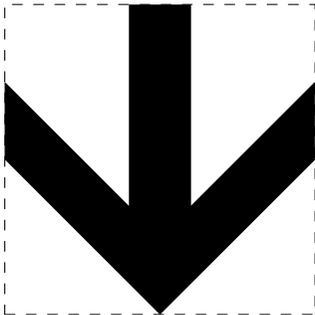
**abcdefghijklmnopqrstuvwxy
z
ABCDEFGHIJKLMN
OPQRSTUVWXYZ
1234567890.,:**

Arrow Art

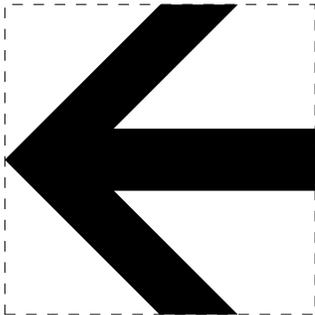
The arrow symbol used throughout the system has been specifically designed to harmonize with the chosen type-faces. The signage vendor should use the arrow art as shown on this page and supplied as digital art on disk.



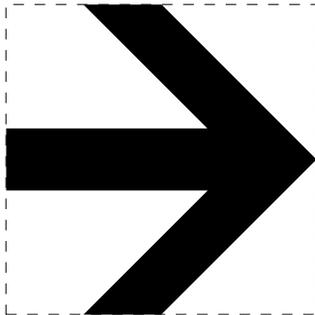
Up



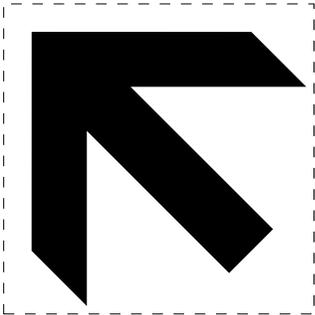
Down



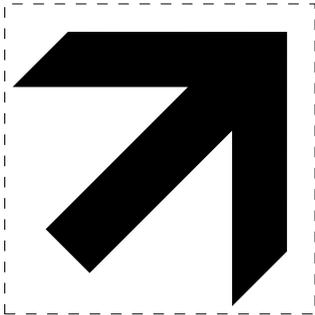
Left



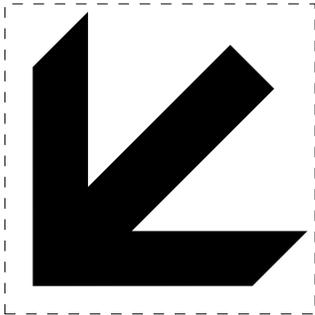
Right



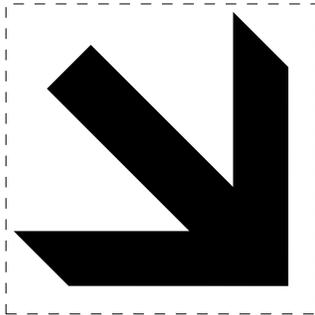
Up Left



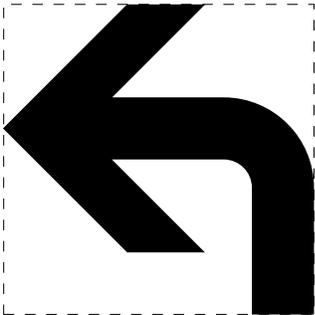
Up Right



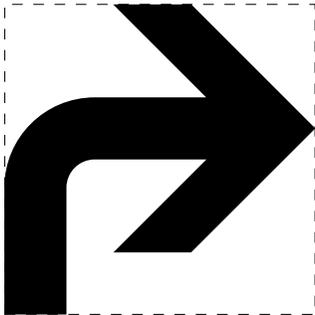
Down Left



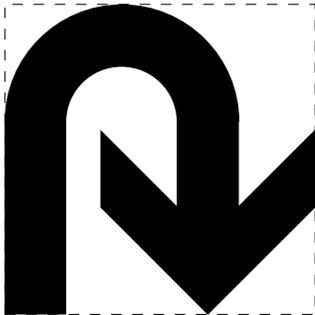
Down Right



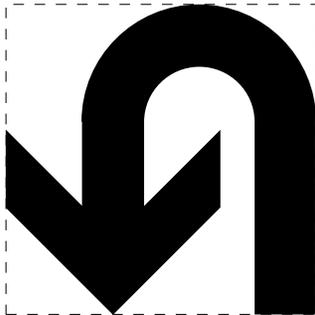
90° Left



90° Right



Back Right



Back Left

Pictographs

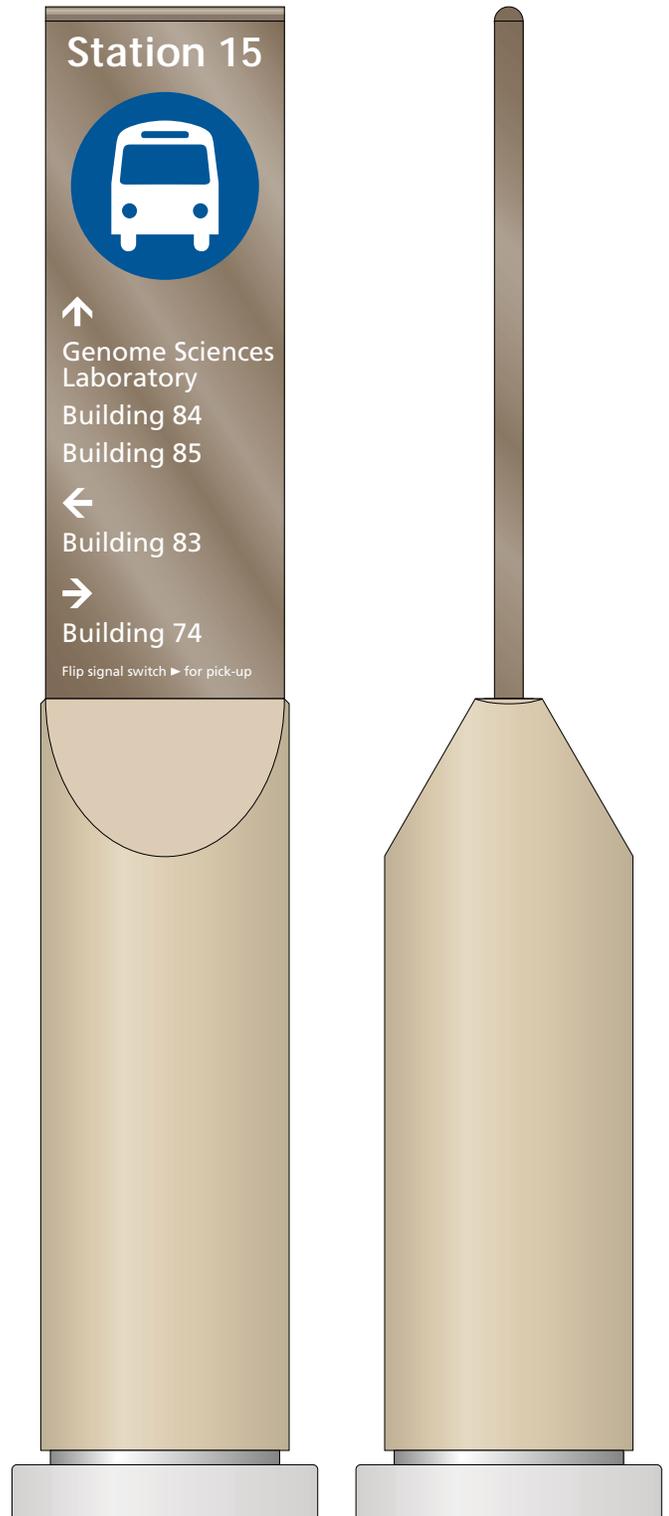
This pictograph has been chosen to harmonize with the standard signage typefaces. The signage vendor should use the art as shown on this page and supplied as digital art on disk.



Shuttle Bus

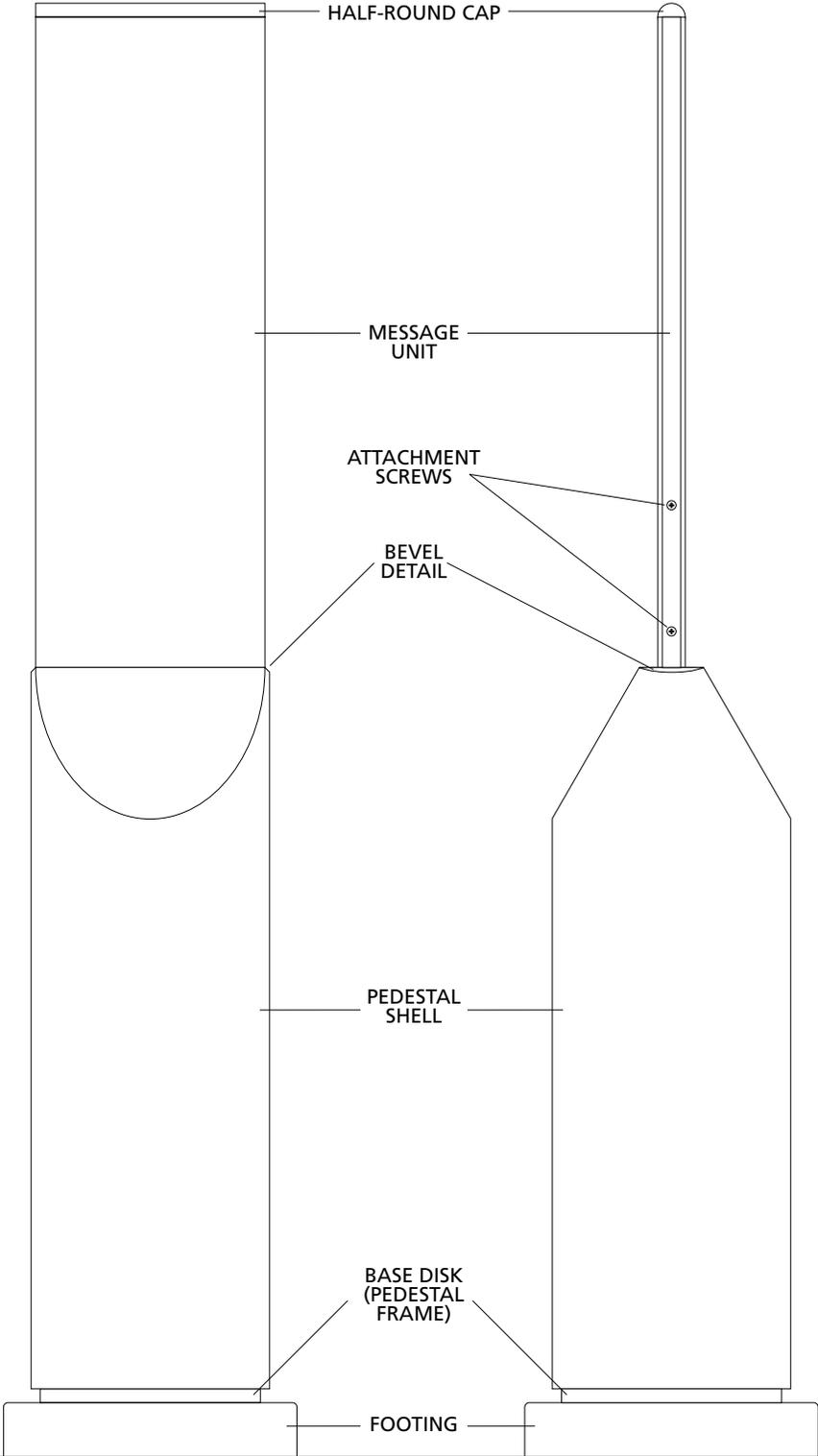
Module XG Identification Primary Bus IPB.00000.XG

On-site shuttle bus stops at the Laboratory which experience a significant volume of visitor traffic are enhanced with pylon-style identification sign units. Each unit displays the Station Number and bus stop identification symbol on the primary face. Many units also display directional information for nearby visitor destinations. Depending on sign location and orientation, units may also display information on the secondary, or reverse, side. Refer to the Shuttle Sign Message Inventory for specific message content.



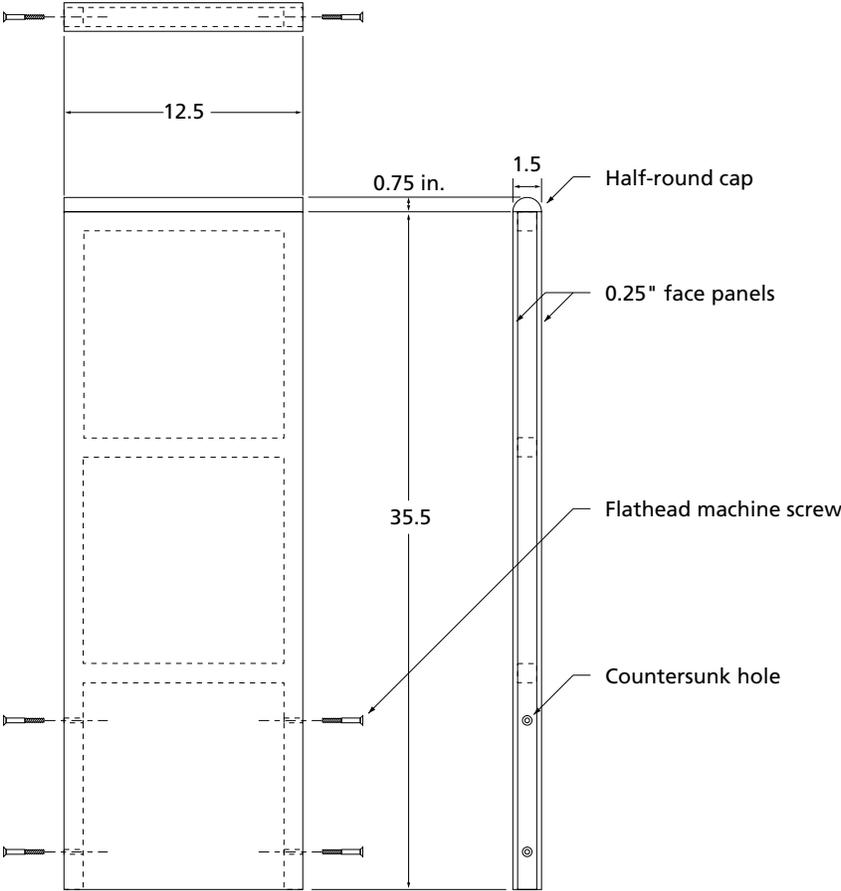
Module XG
Construction
Layout

Scale 1:10



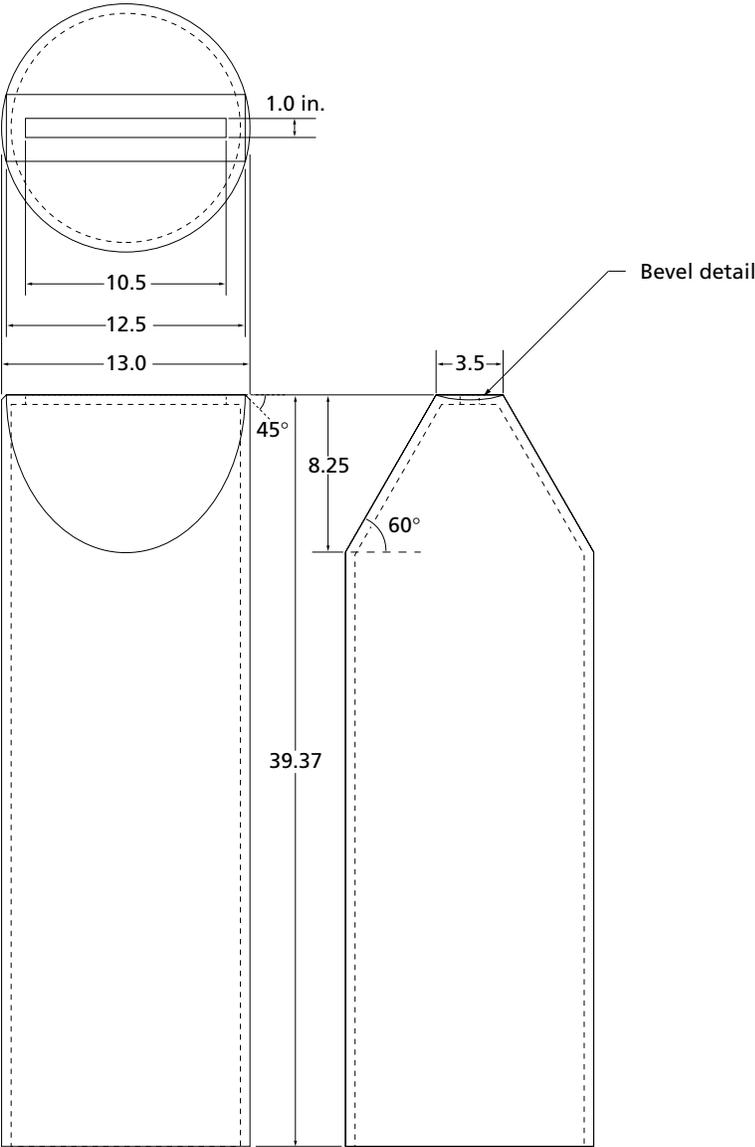
Module XG
Construction
Message Unit

Scale 1:10



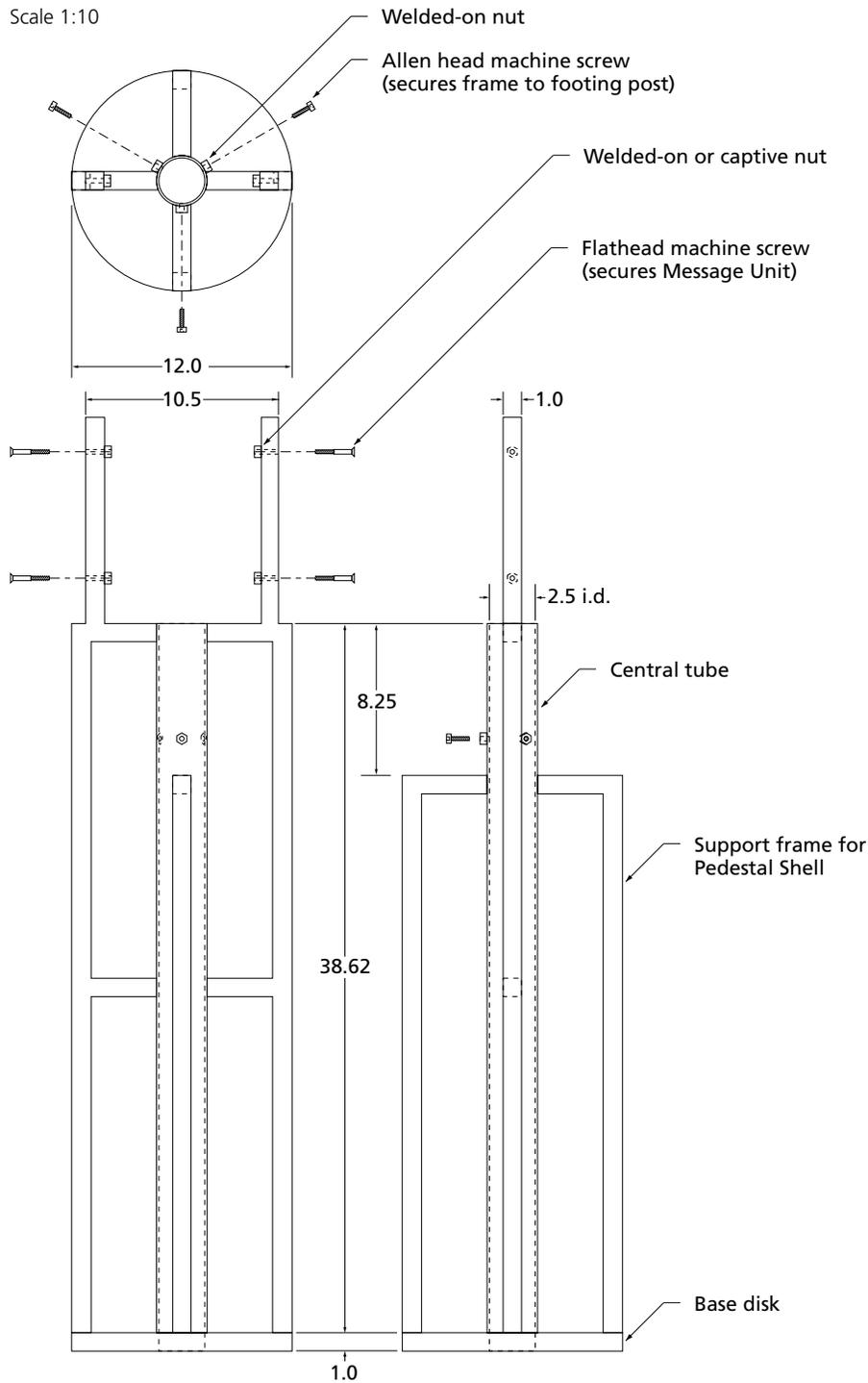
Module XG
Construction
Pedestal Shell

Scale 1:10



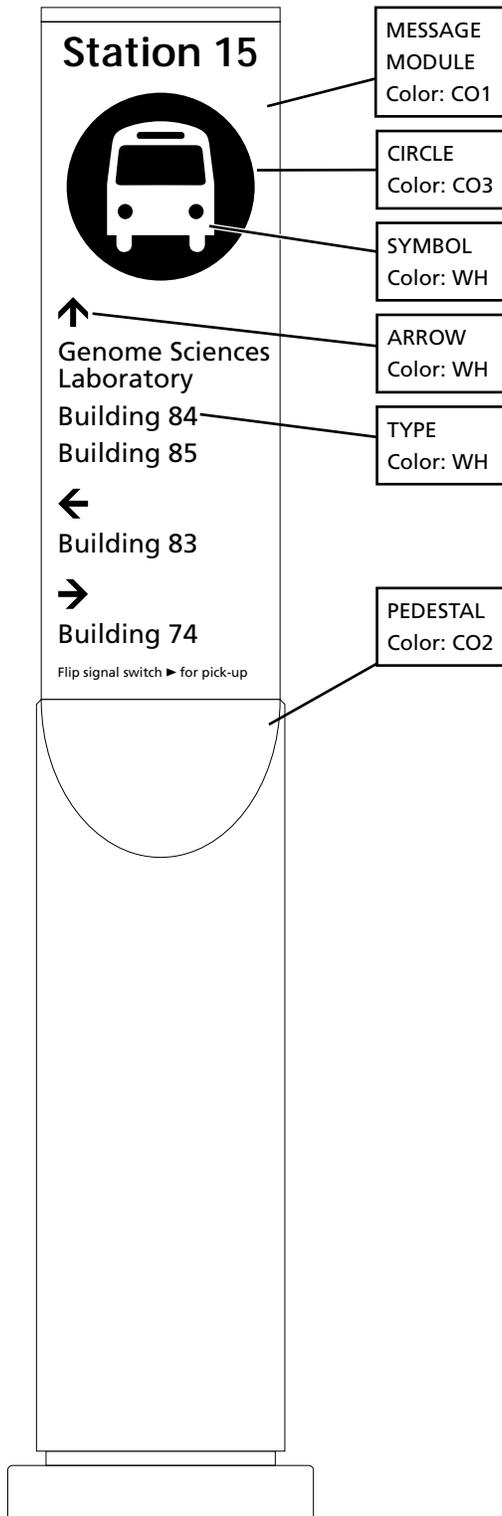
Module XG Construction Pedestal Frame

Scale 1:10



Module XG Graphic Specifications

Scale 1:10

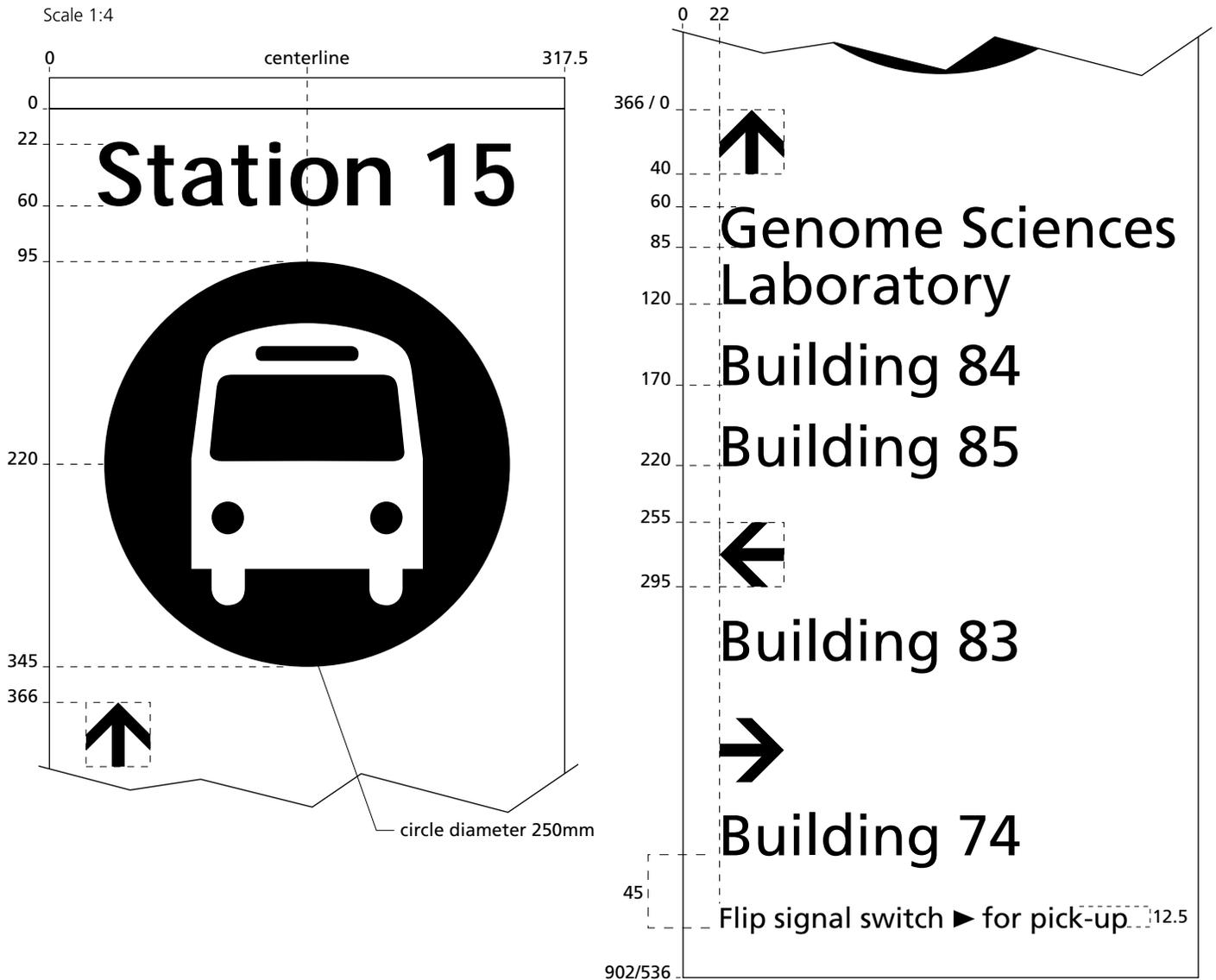


Finish Specifications

COLOR	FINISH
C01	Semigloss polyurethane
C02	Matte enamel/spray-on "light stucco" texture
C03	Semigloss vinyl/custom color
WH	White applied vinyl

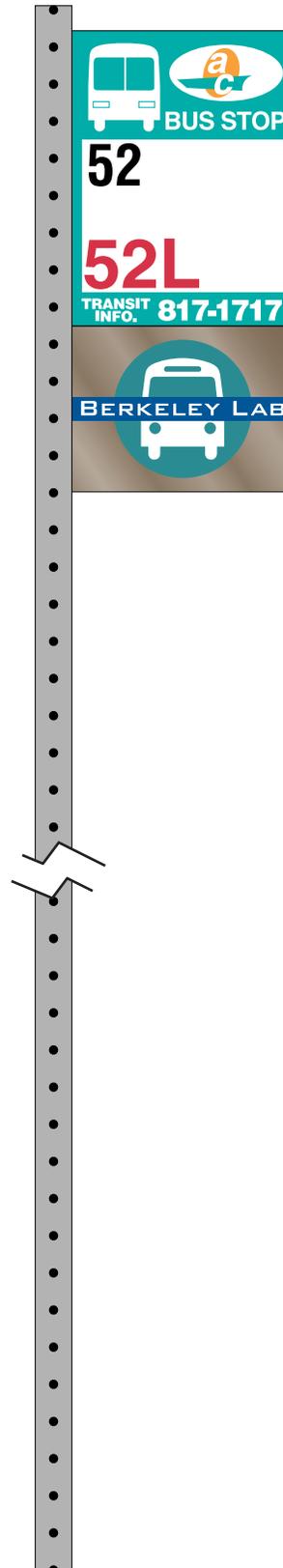
Module XG

Type Specifications



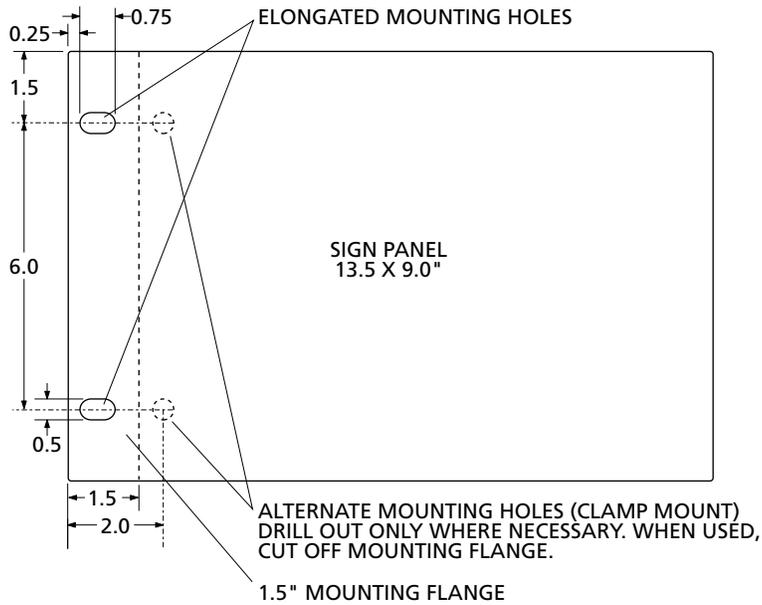
Module XI Identification Secondary Bus ISB.00000.XI

Off-site shuttle bus stops are indicated by post-mounted identification sign panels. These flag-style units are designed to be attached to existing poles, which they may share with AC Transit bus signs. In this case the XI module is attached below the AC Transit sign.



Module XI Construction

Scale 1:4

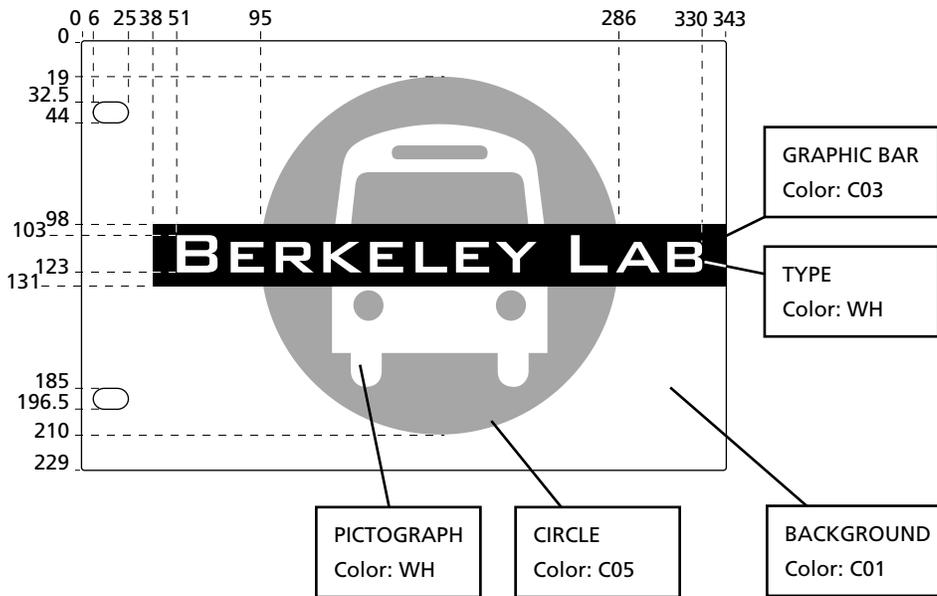


Module XI Dimensions

PANEL	W x H	MATERIAL	DETAIL
Sign Panel	13.5 x 9" (343 x 228.5mm)	.0625" aluminum (1.6mm)	corner radius .0625" (1.6mm)

Module XI Graphic Specifications

Scale 1:4



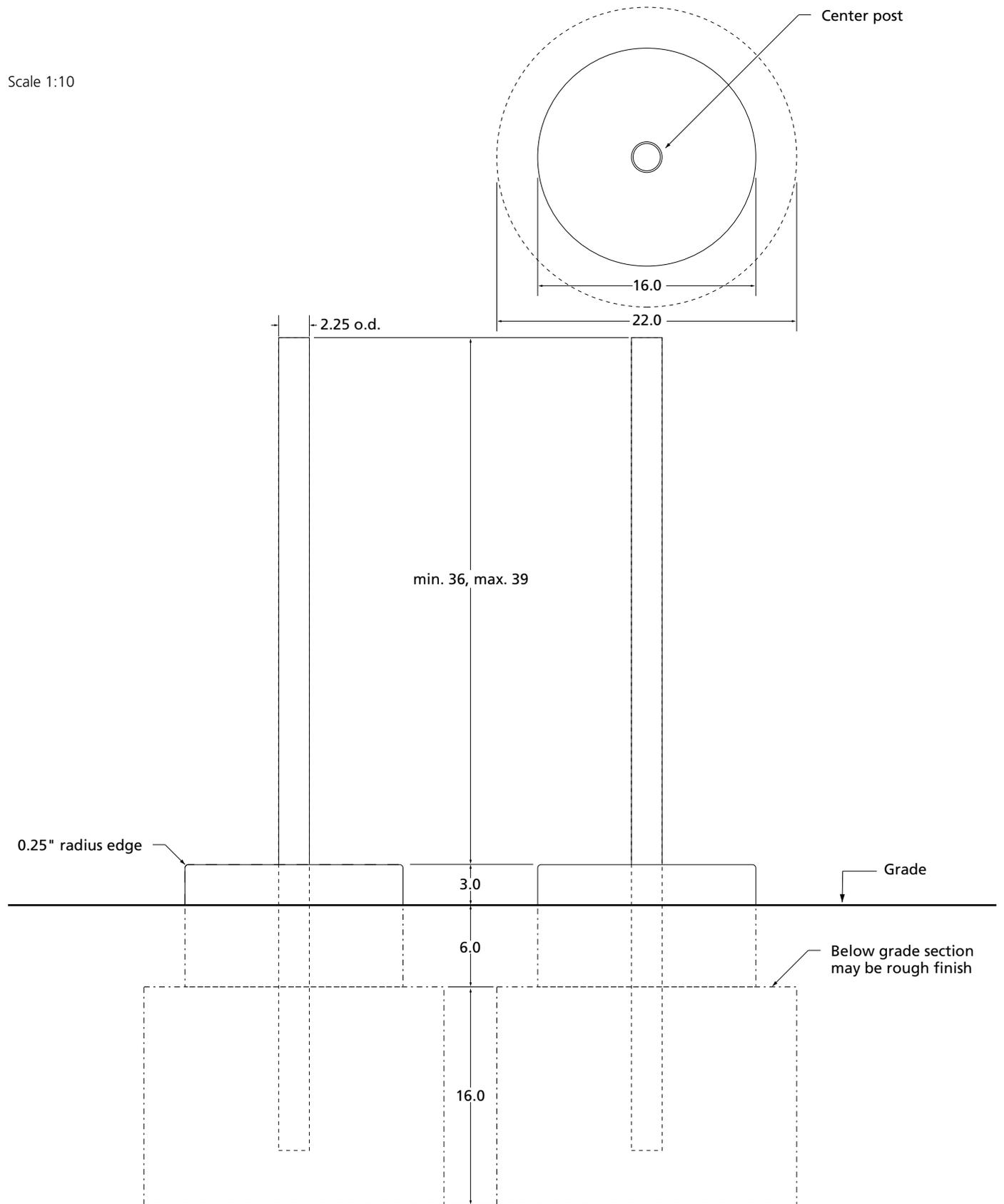
REVERSE

Module XI Finish Specifications

COLOR	FINISH
C01	Semigloss polyurethane
C03	Semigloss vinyl/custom color
WH	Reflective vinyl
C05	Semigloss vinyl/custom color

Pylon Footing Module XG

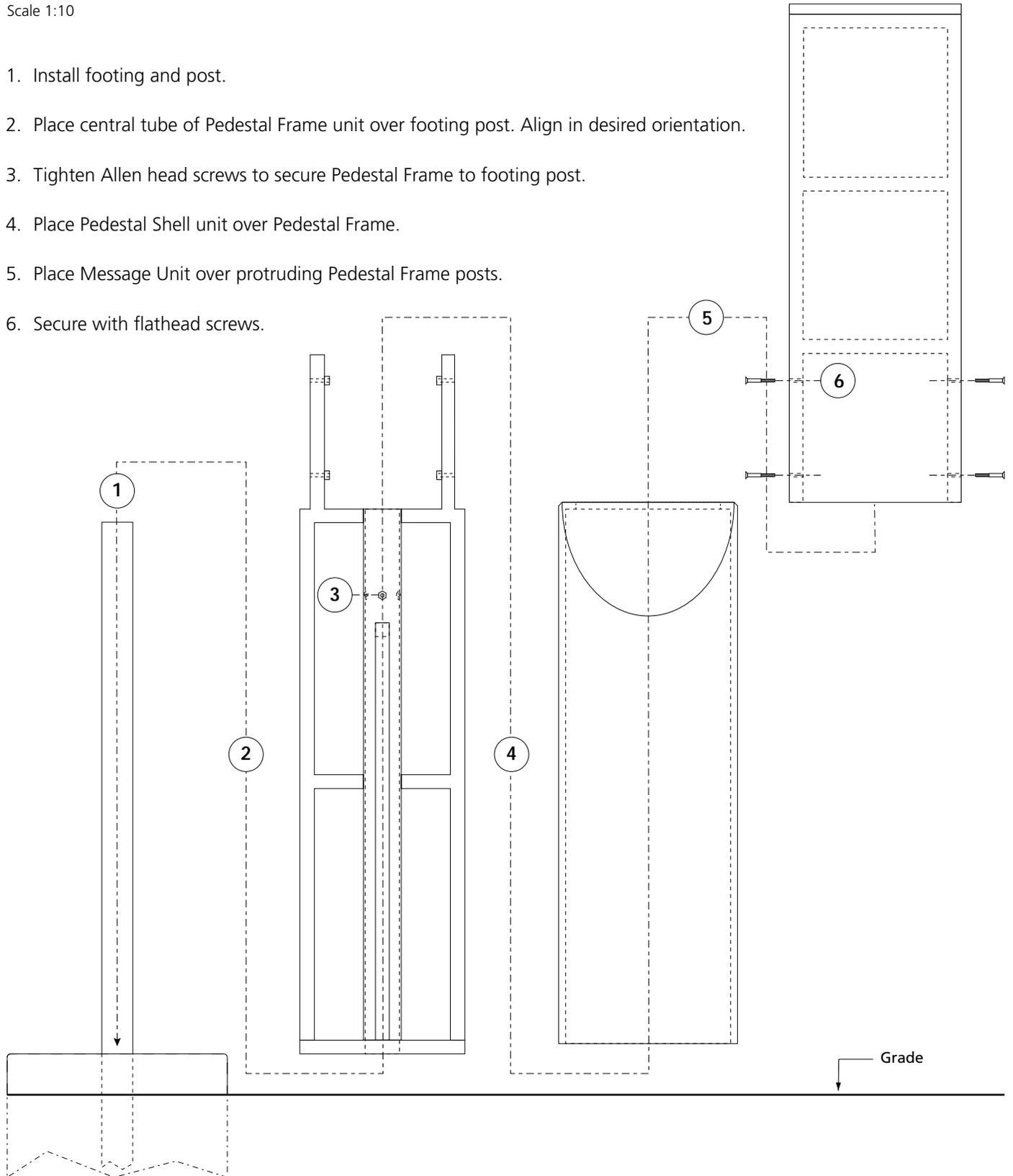
Scale 1:10



Assembly Sequence Module XG

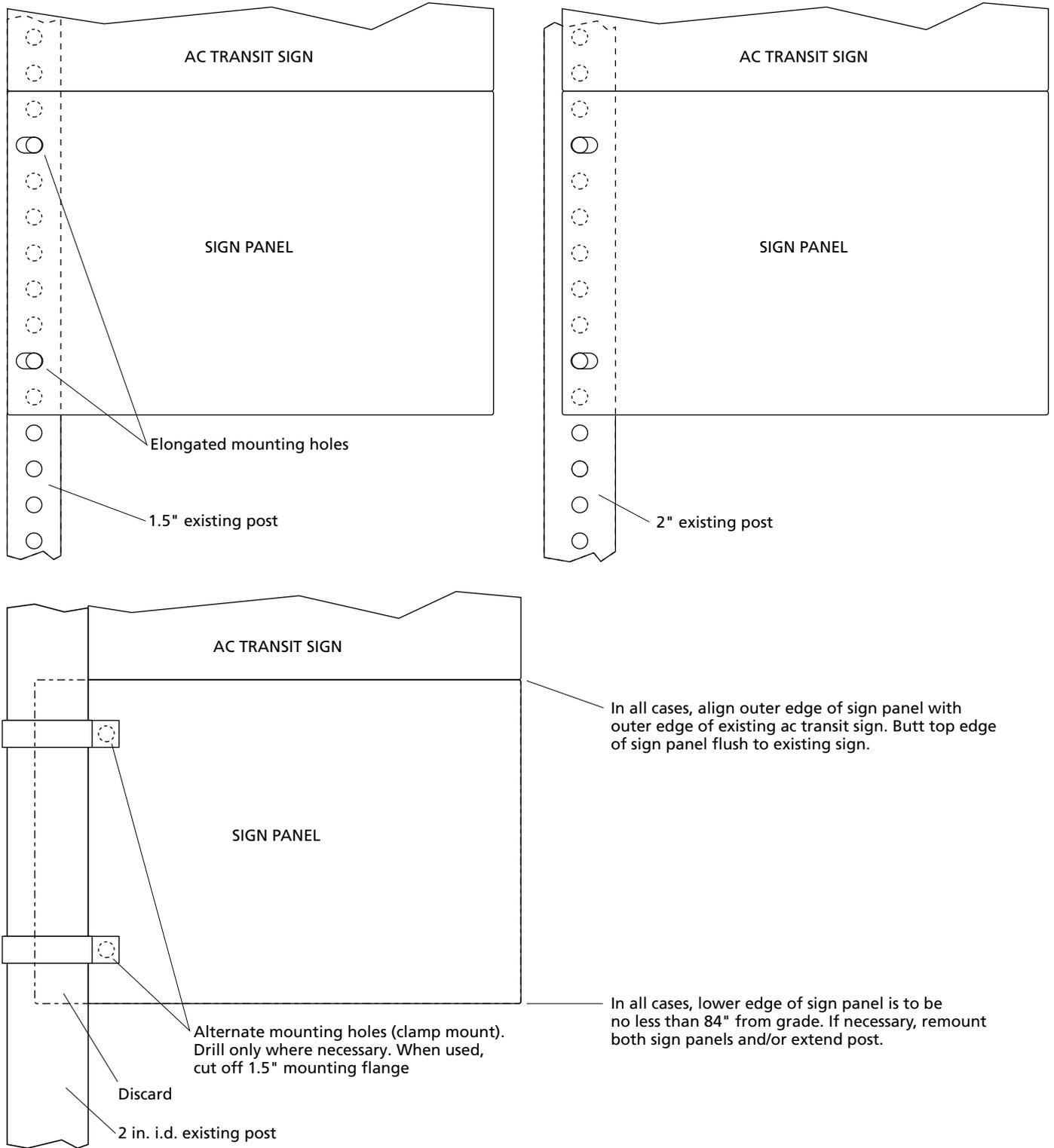
Scale 1:10

1. Install footing and post.
2. Place central tube of Pedestal Frame unit over footing post. Align in desired orientation.
3. Tighten Allen head screws to secure Pedestal Frame to footing post.
4. Place Pedestal Shell unit over Pedestal Frame.
5. Place Message Unit over protruding Pedestal Frame posts.
6. Secure with flathead screws.



Module XI

Scale 1:4



Description

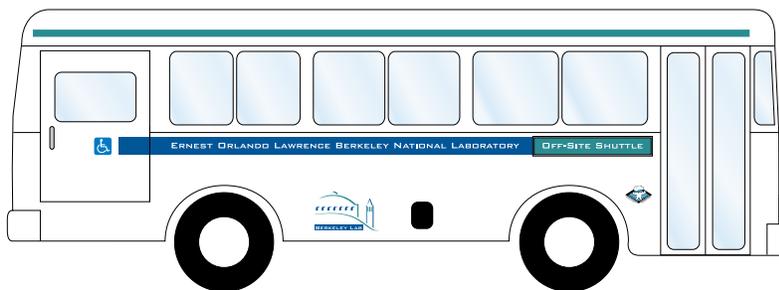
The appearance and utility of the laboratory's shuttle bus fleet have been enhanced with a coordinated graphics scheme. The Lab colors of blue and teal appear as graphic stripes on white buses. Each side of each bus is identified with the Berkeley Lab logo and the name "Ernest Orlando Lawrence Berkeley National Laboratory". The front and rear of each bus are identified with the name "Berkeley Lab" in large letters.

On-Site and Off-Site shuttles are clearly differentiated. The words "On-Site Shuttle" appear on each side near the front of the bus, always on a blue background. The "Off-Site Shuttle" identification always appears on a teal background. Other routes feature their own distinct color schemes.

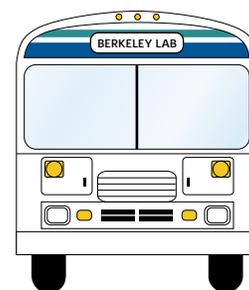
These route identification panels are in the form of removable strips which can be easily exchanged as required. The removable strips are held in place by a four-sided spring-loaded frame, permanently mounted to each side of the bus.

The layout and usage of these graphic elements are described in the following pages. Due to the multiple sizes and makes of buses in use from time to time, these are general guidelines only. Careful measurement and analysis should be made of any new vehicles that come into service before installing graphics.

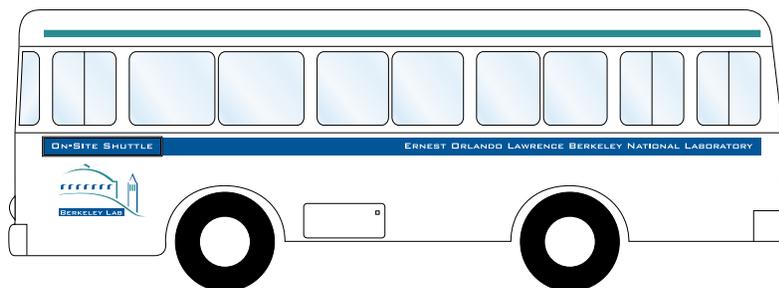
Door Side



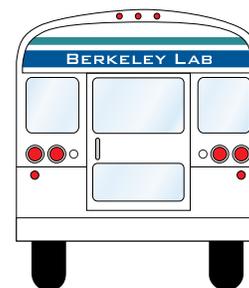
Front



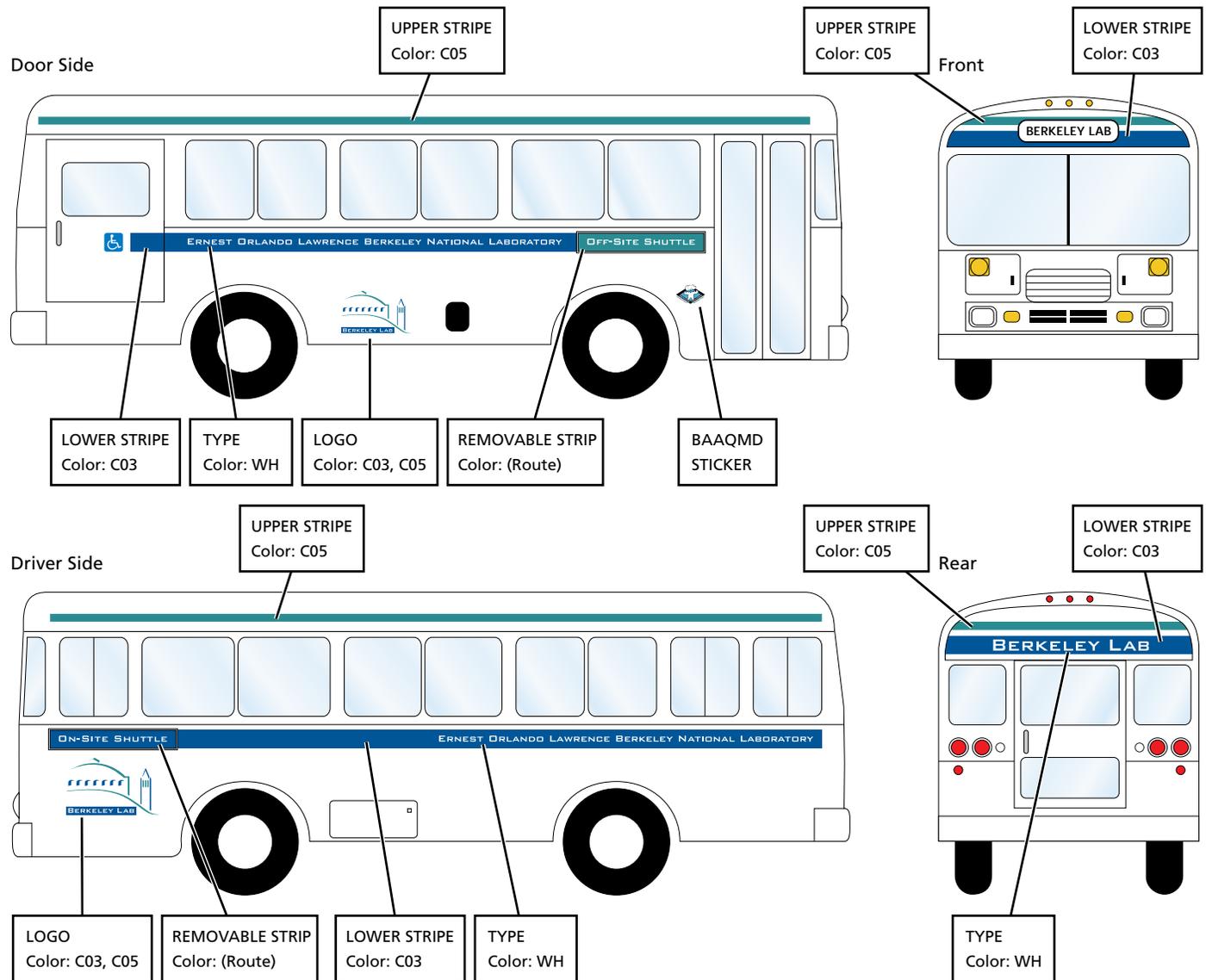
Driver Side



Rear



Layout



Bus Graphics Color Specifications

CODE COLOR

- C03 Pantone 653 Blue/Custom-painted vinyl
- WH White/Vinyl
- C05 Pantone 5483 Teal/Custom-painted vinyl

Side Stripes

The upper (teal) stripe runs above the top of the windows on each side of the vehicle. The lower (blue) stripe runs below the windows in an area unobstructed by corrugated panels. The start and end points of the upper and lower stripes should be aligned, where practical. The actual length of each stripe is determined by the characteristics of the individual vehicle.

Upper Stripe



Width: 3.5 in. Length: as required Color: C05

Lower Stripe/Door Side



Width: 7 in. Length: as required Color: C03 Type Color: WH

Lower Stripe/Driver Side



Width: 7 in. Length: as required Color: C03 Type Color: WH

Note: The identification “Ernest Orlando Lawrence Berkeley National Laboratory” is positioned on the lower stripe starting at the rear of the vehicle. There must be at least 48” of uninterrupted stripe at the end nearest the front of the bus for the placement of the route identification removable strip and frame. The size of the type and/or the width of the stripe may need to be adjusted for certain applications. Two recommended alternatives are shown below.

Lower Stripe/Alternate Type Size – Door Side Shown



Width: 7 in. Length: as required Color: C03 Type Color: WH

Lower Stripe/Alternate Width – Driver Side Shown



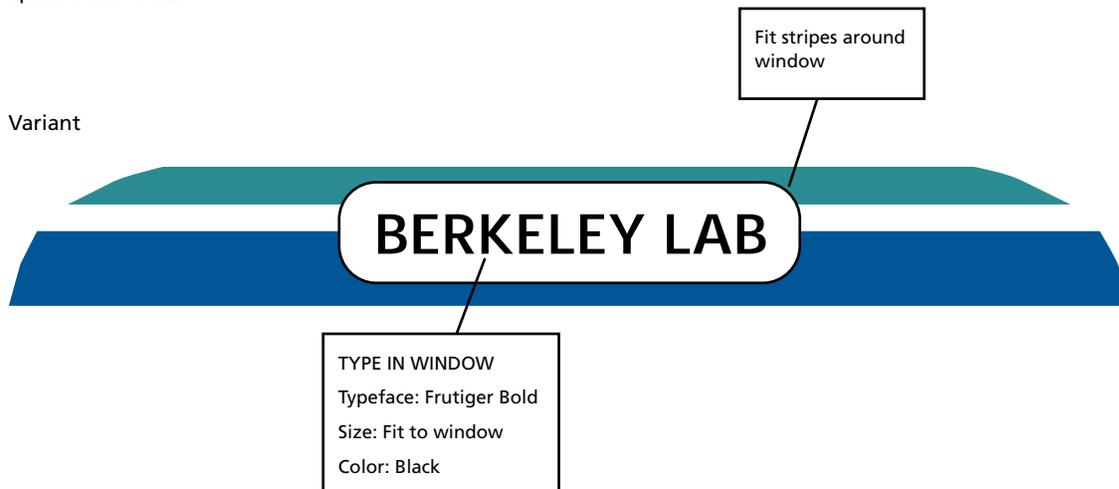
Width: 5 in. Length: as required Color: C03 Type Color: WH

Front/Rear Identification

Vehicle identification graphics are the same on the front and rear, except where a destination "window" interrupts the stripes (variant shown below).

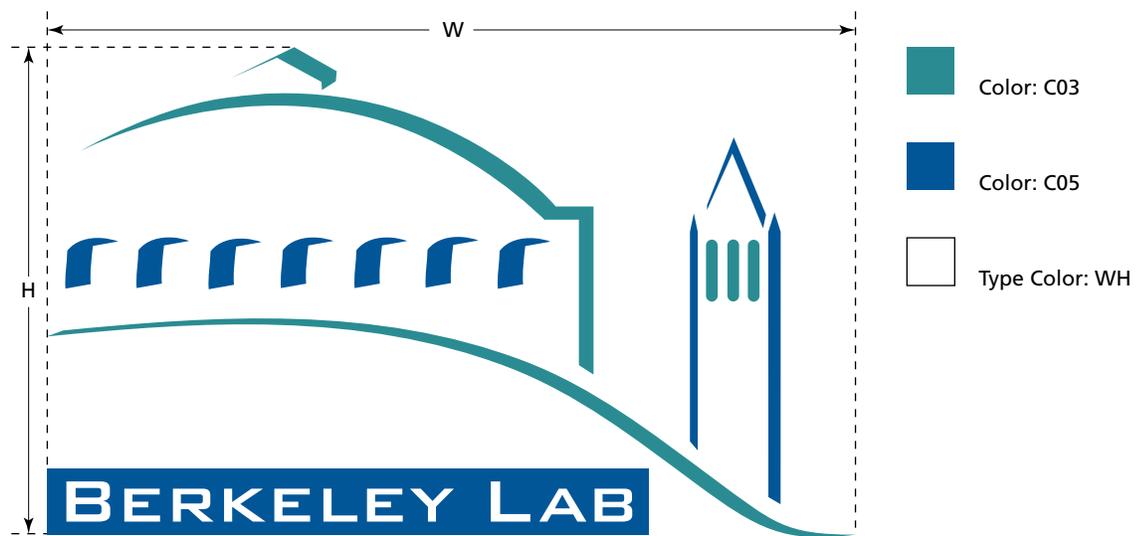


Upper Stripe: 3.5" wide
Lower Stripe: 7" wide
Space between: 2"



Logo

The Berkeley Lab logo appears on both sides of each vehicle. Placement varies, but in general it is positioned beneath the driver's window on the driver side, and between the wheels on the door side (see layout page 4.07.02).



VEHICLE SIDE	POSITION	SIZE (W x H)
Driver	Below driver's window	34 x 20.5"
Door	Between wheels/below corrugations	24.8 x 15"

Removable Strips Frame Structure

Scale 1:10



Size: 6.125 x 47.125 in.
Type: white
Background:
Pantone 5483 Teal



Size: 6.125 x 47.125 in.
Type: white
Background:
Pantone 653 Blue



Size: 6.125 x 47.125 in.
Type: Pantone 5483 Teal
Background: white



Size: 6.125 x 47.125 in.
Type: white over black
Background:
Pantone 872 Metallic



Size: 6.125 x 47.125 in.
Type: white
Background:
Pantone 194 Maroon



Frame Size: 7 x 48 in. (o.d.)
Frame Thickness: 0.975 in.
Color: painted white

Each bus has two frames for removable route identification strips. They are aligned with the lower stripe (blue stripe) on each side of the bus, at the end nearest the front. The frame is secured to the bus by hi-tack foam tape. Each side of the frame flips open to receive the removable strip, and snaps closed to secure it.

Description

The route map handout is designed to be an easy-to-use guide to the shuttle bus system. The format is an accordion-fold flyer. One side is dedicated to On-Site shuttle information, the other side to Off-Site information.

Art for the route map handout was created digitally in Adobe Illustrator for Macintosh format, and can be easily updated to reflect new development at the Laboratory.

On-Site Shuttle Route

Transfer Station for Off-Site Shuttle
Main Gate
Off-Site Shuttle to UC Berkeley Campus

MAP KEY

- On-Site Shuttle Route
- Off-Site Shuttle Route
- Strawberry Route
- Regular Stop
- Signal Stop
- Stops in both directions
- Building Destinations

On-Site Shuttle Schedule

SERVICE HOURS	SERVICE INTERVALS	STARTING POINT	COMPLETE CIRCUIT
6:40am - 5:10pm	Every 10 minutes	First bus leaves Station 1 at 6:40am	20 minutes
5:10pm - 6:30pm	Every 20 minutes	Last bus leaves Station 1 at 6:30pm	

Strawberry Route Schedule

SERVICE HOURS	SERVICE INTERVALS	STARTING POINT	COMPLETE CIRCUIT
8:55am - 5:40pm	Every 15 minutes	Heart Mining Circle (see other side)	15 minutes

DESTINATION BLDG STOP

Advanced Light Source	6	1
Auditorium	50	2
Cafeteria	54	3
Conference Center	54	4
Genome Sciences Laboratory	84	5
Laboratory Directorate	50	6
National Center for Electron Microscopy	72	7
EB-Inch Cyclotron	88	8

Instructions for Bicyclists

Use the bicycle rack at your room exit. Berkeley Lab is not able to remove or provide bicycles.

Loading a Bicycle

1. Hold the driver hand you are loading a bicycle.
2. Load your bicycle on the quality and safety as possible onto the rack located in the rear of the bus.
3. Hang your bicycle by the rear wheel in case quick removal from the rack.
4. Secure bicycle with the tie-down.

Unloading a Bicycle

1. When the driver tells you to be unloading a bicycle.
2. Hold your bicycle in a steady and stable position.
3. Signal the driver that your bicycle has been unloaded.

See other side for information on Off-Site Shuttle routes and schedules.

Off-Site Shuttle Route

Off-Site Shuttle stops are marked with this sign.

Off-Site Shuttle Routes

SERVICE HOURS	SERVICE INTERVALS
Daytime Route	Every 10 minutes
Daytime Stop	6:20am - 4:00pm
Evening Route	Every 10 minutes until 5:40pm
Evening Stop	4:10pm - 7:00pm

Strawberry Route Schedule

Departs from the Heart Mining Circle every 15 minutes.

First bus 8:55am
Last bus 5:40pm

Rockridge Express Departures

Station 1	Station 1
8:55am	3:40pm
7:05am	4:30pm
7:35am	6:40pm
8:15am	5:10pm
	6:10pm

DESTINATION BLDG STOP

Calvin Lab	3	Heas School
Downer Lab	1	East Gate
Hinks	516	Berkeley BART
Promenade	918	Milvia/University

Berkeley Lab Off-Site Shuttle stops are marked with the sign shown at left. Passengers need to stand at the marked locations.

Berkeley Lab shuttle buses are WHITE with BLUE and TEAL stripes.

When you see the shuttle bus approaching, WAVE AT THE DRIVER so the driver knows you want to board the bus. Shuttle share bus stops with other transit systems.

As you board, hold out your building number of your laboratory destination. The driver will be able to assist you with directions. You may transfer to the On-Site Shuttle bus at Station 1, Building 6.

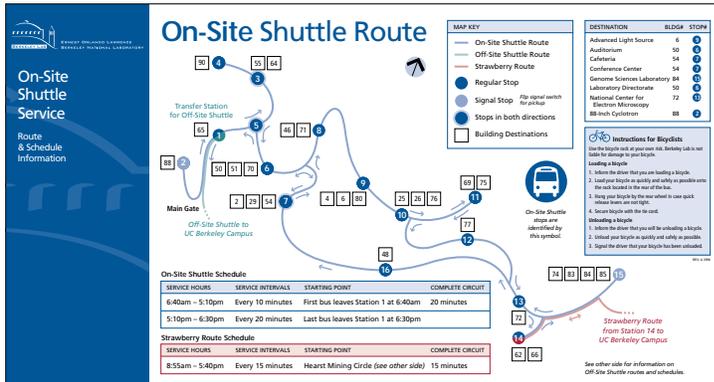
See other side for On-Site Shuttle route and schedule information.

Bicyclists - see other side for information on bringing bicycles aboard shuttle buses.

Berkeley Lab Shuttle services are for official employees and guest use only. They may be used for identification.

On-Site

Scale 1:4



On-Site Page Color Specifications

COLOR	USE
Process Black	Text & map callouts
Pantone 653	Cover; On-Site Route; On-Site Shuttle Stop symbol; accents
Pantone 194	Strawberry Route
Pantone 5483	Off-Site Route

Building Identification Color Swatches

Building Identification

These color swatches are approximations for identification purposes only, and are not to be used for color matching. See manufacturer's swatch books for authoritative colors.



CG1A Plochere G129 (Blue Gray)



CG1B Plochere G133 (Light Blue Gray)



CG2A Plochere G194 (Earthtone Green)



CG2B Plochere G197 (Light Earthtone Green)

Building Identification

These color swatches are approximations for identification purposes only, and are not to be used for color matching. See manufacturer's swatch books for authoritative colors.



CG3A Plochere G26 (Earthtone Brown)



CG3B Plochere G29 (Light Earthtone Brown)



WH [none] White

Shuttle System Color Swatches

Shuttle System

These color swatches are approximations for identification purposes only, and are not to be used for color matching. See manufacturer's swatch books for authoritative colors.



C01 Matthews 41-312 Medium Bronze



C02 Matthews 47C-2T Riviera Sand



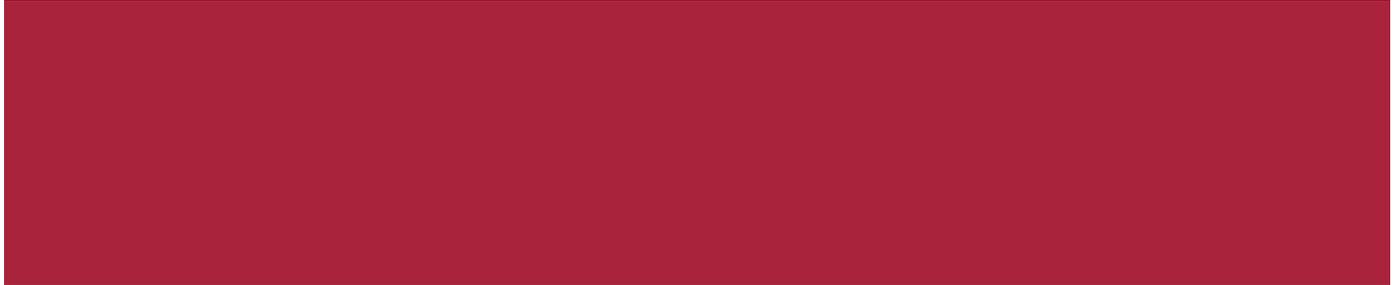
C03 Pantone 653 CV Blue



C05 Pantone 5483 CV Teal

Shuttle System

These color swatches are approximations for identification purposes only, and are not to be used for color matching. See manufacturer's swatch books for authoritative colors.



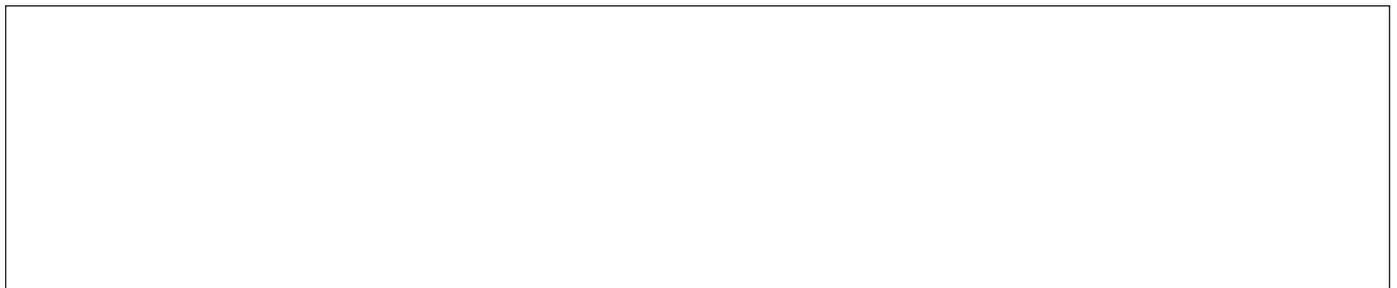
C06 Pantone 194 CV Strawberry



C07 Pantone 872 CV Old Gold Metallic



BK [none] Black



WH [none] White

Exterior Signage Areas

Exterior Signage Areas



The Exterior Signage Areas are defined for the purpose of numbering and managing the exterior sign units. The first digit of the five-digit sign number indicates the area in which that sign is located.

