



City of Rockaway Beach

Planning Commission Meeting Agenda

Date: Thursday, November 21, 2024
Time: 5:00 P.M.
Location: Rockaway Beach City Hall, 276 HWY 101 - Civic Facility

Watch live stream here: <https://corb.us/live-stream>
View meeting later here: <https://corb.us/planning-commission/>

Join here to attend remotely:

<https://us06web.zoom.us/j/86088872566?pwd=bLObDARU9gyLu9hBgFJpZtNG6bh5DE.1>

Meeting ID: 860 8887 2566

Passcode: 970904

Dial by your location

253 215 8782 US (Tacoma)

1. **CALL TO ORDER** – Bill Hassell, Planning Commission President
2. **PLEDGE OF ALLEGIANCE**
3. **ROLL CALL**
4. **APPROVAL OF MINUTES**
 - a. October 17, 2024 Meeting Minutes
5. **PRESENTATIONS, GUESTS & ANNOUNCEMENTS**
6. **STAFF REPORTS**
7. **PUBLIC HEARING** – None Scheduled
8. **CITIZEN INPUT ON NON-AGENDA ITEMS**
9. **OLD BUSINESS** – None Scheduled
10. **NEW BUSINESS**
 - a. **Discussion Regarding City Reader Board Sign Operation** – Dan Emerson, Public Works Superintendent
10. **PLANNING COMMISSION COMMENTS & CONCERNS**
11. **ADJOURNMENT**



City of Rockaway Beach

Planning Commission Meeting Minutes

Date: Thursday, October 17, 2024
Location: Rockaway Beach City Hall, 276 HWY 101 - Civic Facility

1. CALL TO ORDER

Planning Commission President Hassell called the meeting to order at 5:00 p.m.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Start time: [05:02:23 PM \(00:02:02\)](#)

President: Bill Hassell

Commissioners: Sandra Johnson, Nancy Lanyon, Pat Olson (arrived 5:25 p.m.), Zandra Umholtz, and Stephanie Winchester

Commissioners Excused: Georgeanne Zedrick

Council Members Present: Mary McGinnis, Planning Commission Liaison

Council Member Excused: Charles McNeilly, Mayor

Staff Present: Luke Shepard, City Manager; TJ Fiorelli, Contract Planner; Melissa Thompson, City Recorder; and Elizabeth Avila, Administrative Assistant II

4. APPROVAL OF MINUTES

Start time: [05:03:23 PM \(00:03:01\)](#)

a. September 19, 2024 Meeting Minutes

Umholtz made a **motion**, seconded by Winchester, to approve the Thursday, September 19, 2024 Planning Commission Meeting Minutes as written.

The **motion carried** by the following vote:

Aye: 5 (Johnson, Lanyon, Umholtz, Winchester, Hassell)

Nay: 0

5. PRESENTATIONS, GUESTS & ANNOUNCEMENTS – None Scheduled

6. STAFF REPORTS

Start time: [05:04:39 PM \(00:04:18\)](#)

City Manager Shepard noted that City Planner Johnson was on leave. Shepard reported that the website Community Development page included maps and zoning ordinance information, as well as FEMA Biological Opinion (BiOp) information. The page included a form for land use inquiries.

Shepard introduced Contract Planner TJ Fiorelli and explained he would be assisting with some planning activities while Johnson was on leave.

Shepard announced that Sarah Absher would be presenting a public information session on the FEMA Biological Opinion (BiOp) on October 28, 2024. Staff would be participating in additional meetings regarding the BiOp and was working on the issue.

7. PUBLIC HEARING

Start time: [05:08:11 PM \(00:07:49\)](#)

a. Consideration to Approve the Proposed Amendments to the Rockaway Beach Zoning Ordinance 143, Section 4.050 Sign Requirements, and Recommend its Adoption to the City Council

Hassell opened the public hearing at 5:08 p.m.

Hassell provided an introduction and read opening statements, public hearing disclosure statements and procedures, and testifying instructions.

Contract Planner TJ Fiorelli presented the Staff Report. (A copy of the staff report is included in the record for the meeting.)

Hassell invited Commissioners to ask questions of staff regarding the amendments.

Shepard explained to Lanyon that the public hearing notice included state provisions regarding appeals for the Land use Board of Appeals.

Lanyon inquired if there was consideration for sign location placement for Short-Term Rentals (STRs) and discussion ensued. After discussion, there was consensus to add a provision referring to STR sign requirements.

Johnson suggested that a provision be added to address volunteer and non-profit groups that post signs for events, but do not have a physical location. The Commission concurred. Johnson declared a potential conflict of interest, because she is associated with groups that use sandwich board signs, including Rockaway Beach volunteers, Meals for Seniors, and SOLVE.

Lanyon suggested adding "County" to exempt signs and adding an exemption to flashing signs for emergency notification. Johnson suggested allowing no flashing signs except for emergencies (including governments).

Hassell invited public testimony. There were no guests present.

City Recorder Thompson reported that no written testimony was received.

Winchester made a **motion**, seconded by Johnson, to close the Public Hearing at 5:25 p.m.

Olson arrived at 5:25 p.m.

The **motion carried** by the following vote:

Aye: 5 (Johnson, Lanyon, Umholtz, Winchester, Hassell)

Nay: 0

Abstain: 1 (Olson)

Hassell invited the Commission to deliberate.

There was further discussion regarding allowing an exemption for flashing signs for governments in the case of emergencies. There was discussion regarding the reader board sign the City proposed to install that prompted the proposed changes to the ordinance. Shepard noted that the sign was already in production, and explained that the Planning Commission could have further discussion in the future regarding the specifics of how it would be operated.

After discussion, there was consensus to add "County" to exempt signs, add a reference to STR sign requirements, and to loosen restrictions on placement of sandwich board sign placement for non-profits and volunteer entities for special events.

Johnson made a **motion**, seconded by Olson, to direct staff to craft language consistent with discussion to include STR reference, sandwich boards and exclusion for governmental agencies.

The **motion carried** by the following vote:

Aye: 6 (Johnson, Lanyon, Olson, Umholtz, Winchester, Hassell)

Nay: 0

Umholtz made a **motion**, seconded by Lanyon, that the Planning Commission approve the proposed amendments to the Rockaway Beach Zoning Ordinance 143, Section 4.050 Sign Requirements, with the three recommendations to be added, and forwarded to the City Council for adoption.

The **motion carried** by the following vote:

Aye: 6 (Johnson, Lanyon, Olson, Umholtz, Winchester, Hassell)

Nay: 0

8. CITIZEN INPUT ON NON-AGENDA ITEMS

Start time: [05:59:36 PM \(00:59:15\)](#)

No audience members were present.

9. OLD BUSINESS

Start time: [05:59:53 PM \(00:59:32\)](#)

a. Request from The City Council for further Review of the Small Community Grant to Clarify “Community Entities”

Hassell invited public comment. No audience members were present.

City Manager Shepard explained that the Planning Commission approved the Small and Large Community grant materials, and the City Council reviewed them in a Workshop. Shepard shared that the Council asked the Planning Commission to clarify “community entities”, expressing concerns whether funds can or should be granted to individuals. Shepard explained that the City Attorney confirmed that there is no legal issue with the city awarding grant funds to individuals, provided that they acknowledge responsibility for the project. McGinnis noted that the grants could help community entities that may evolve into nonprofits.

Johnson declared a conflict of interest and recused herself from the discussion since she has applied for a grant in the past, and may in the future, for the Rockaway Beach Volunteers, which is not a formal non-profit.

Lanyon suggested changing language to “community service or enhancement entities”. Shepard and McGinnis commented that the grant criteria defined the type of community entity that is eligible.

Winchester noted that the intent of the Planning Commission was to include community entities that are not designated as non-profits.

Umholtz made a **motion**, seconded by Winchester, to accept the Small Community Grant as is and send it to the City Council for adoption.

The **motion carried** by the following vote:

Aye: 5 (Lanyon, Olson, Umholtz, Winchester, Hassell)

Nay: 0

Recused: 1 (Johnson)

10. NEW BUSINESS

a. **Consideration to Approve Request for One-Year Extension for Lake Lytle Estates Phases IV-VII - Preliminary Subdivision Case File #23-01**

Start time: [06:09:25 PM \(01:09:03\)](#)

Hassell invited public comment. No guests were present.

McGinnis recused herself from the meeting.

Johnson declared a potential conflict of interest because her daughter lives adjacent to the project. Hassell declared a potential conflict of interest because he lives adjacent to the property.

Contract Planner TJ Fiorelli read aloud the staff report prepared by City Planner Johnson. (A copy of the staff report is included in the record for the meeting.)

Johnson made a **motion**, second by Olson, based on the facts and evaluations presented in the City Staff Report, that the Planning Commission approve a 1-year extension of time, until November 13, 2025, for Lake Lytle Estates Phases IV-VII - Preliminary Subdivision Case File #23-01, to allow the Applicant to file a Final Subdivision Plat with the City of Rockaway Beach, and direct staff to prepare findings and conclusions, and authorize the Chair to sign an order to that effect.

Lanyon expressed concerns that facts were in flux due to the FEMA BiOp and discussions regarding amendments to middle housing code provisions. Winchester explained that when each property is developed, they will be required to comply with all land use ordinances at the time of development. Fiorelli confirmed that Winchester's explanation regarding development was correct. Fiorelli further explained that nothing in the request for extension appeared to be in conflict with the FEMA BiOp or Senate Bill 406 (SB406) middle housing provisions.

Umholtz stated that the approval was just for plots and recalled extensive conditions of approval. There was brief discussion regarding the conditions. Umholtz inquired about the applicants' comment in the request regarding water and sewer utilities. Shepard explained that meeting the City's utility technical specifications and design requirements may take time.

Johnson asked if the applicant were to seek another extension, after significant changes to ordinances were made, if the Commission would need to further evaluate whether changes needed to be made prior to approval. Fiorelli stated that could be the case, but for the current request, nothing significant has changed, and the application was not being relitigated. Johnson suggested the request was reasonable, given the number of conditions required of the applicant. Fiorelli confirmed for Winchester that if something significantly changed the intent of the original application, or if it was a condition of approval, that it would come back to the Planning Commission for review.

Shepard confirmed for Umholtz that there is a 10-year timeline on the original Planning Commission preliminary subdivision approval.

The **motion carried** by the following vote:

Aye: 5 (Johnson, Olson, Umholtz, Winchester, Hassell)

Nay: 0

Abstain: 1 (Lanyon)

Lanyon explained that she was abstaining because she was uncomfortable with the position that nothing had changed, and was uncomfortable with an extension because she believed the criteria was in flux.

11. PLANNING COMMISSION COMMENTS & CONCERNS

Start time: [06:30:15 PM \(01:29:54\)](#)

Winchester shared she was excited to look at findings from the Great Shakeout and hoped to look at evacuation areas in the future to ensure they are obtainable.

Lanyon advocated for considering the acquisition of the Rockaway Roastery property to be used as a meeting space, based on public comments desiring more community spaces. Lanyon commended staff.

Olson stated he was glad to be a part of the city moving forward.

Commissioner Johnson concurred with Olson, and was especially pleased with the exploration to acquire Jetty Creek watershed. Johnson thanked staff for their work.

Umholtz shared that the Great Shakeout was a great event and stressed the importance of practice. She thanked staff.

McGinnis complemented emergency management and commented on the increased level of engagement in the Great Shakeout event. McGinnis reported she attended a Salmonberry Trail Foundation event and a DEQ drinking water workshop. She commended staff for work on the watershed acquisition. McGinnis encouraged the Commission to visit the Wilder community in Newport, sharing that it was a good example of mixed-income housing and development related to SB406.

Hassell shared his experience during Great Shakeout and concerns regarding aging emergency equipment. Hassell advocated for additional rest benches at each turnout on the Old Cedar trail and shared he was working on ways to get benches that don't obstruct wheelchair access. Hassell proposed that a bench be dedicated in honor of David Elkins.

12. ADJOURNMENT

Start time: [06:42:52 PM \(01:42:31\)](#)

Olson made a **motion**, seconded by Johnson, to adjourn the meeting at 6:43 p.m.

The **motion carried** by the following vote:

Aye: 6 (Johnson, Lanyon, Olson, Umholtz, Winchester, Hassell)

Nay: 0

MINUTES APPROVED THE
21st DAY OF NOVEMBER 2024

William Hassell, President

ATTEST

Melissa Thompson, City Recorder

DRAFT

City of Rockaway Beach, Oregon
276 S. Highway 101, PO Box 5
Rockaway Beach, OR 97136
(503) 374-1752 FAX (503)374-0601



11/14/24

Dear Planning Commission Members

Tonight, I want to provide some details on the new electronic message center (EMC) at City Hall. In front of you, there should be a design layout along with recommendations for nighttime operation of the EMC. These recommendations outline how to measure light output to ensure compliance with nighttime illumination criteria. Our EMC is equipped with a sensor that automatically detects ambient light levels, allowing it to adjust brightness to remain compliant with local illumination standards. We've also purchased a light meter to measure and verify these illumination levels.

This EMC is also capable of receiving Amber Alerts and other critical notifications through the Integrated Public Alert and Warning System (IPAWS). Additionally, the system can display content sent via email through IMAP (Internet Message Access Protocol) Secure. Authorized personnel can send emails directly to an account monitored by the EMC, enabling messages to be updated remotely via the cloud without needing onsite access.

Dan W. Emerson, Superintendent
City of Rockaway Beach Public Works
P: 503.374.0586 / C: 503.457.6094
PublicWorks@corb.us

EXTERIOR | PYLON DISPLAY



PROPOSED



NOTE:
EXISTING SHRUBS & STONE
TO BE REMOVED.
[BY OTHERS]
EXISTING POST & PANEL
TO REMAIN.

PROPOSED

A EXTERIOR ELEVATION
Scale: 1/4" = 1'-0"

2424 SE Holgate Boulevard
Portland, Oregon 97202
503-232-4172

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WA SECURSI020CF

Account Manager: Joseph Platt

Project Name

276 US-101
Rockaway Beach, OR 97136

Client Approval: _____
Landlord Approval: _____

COLORS + MATERIALS

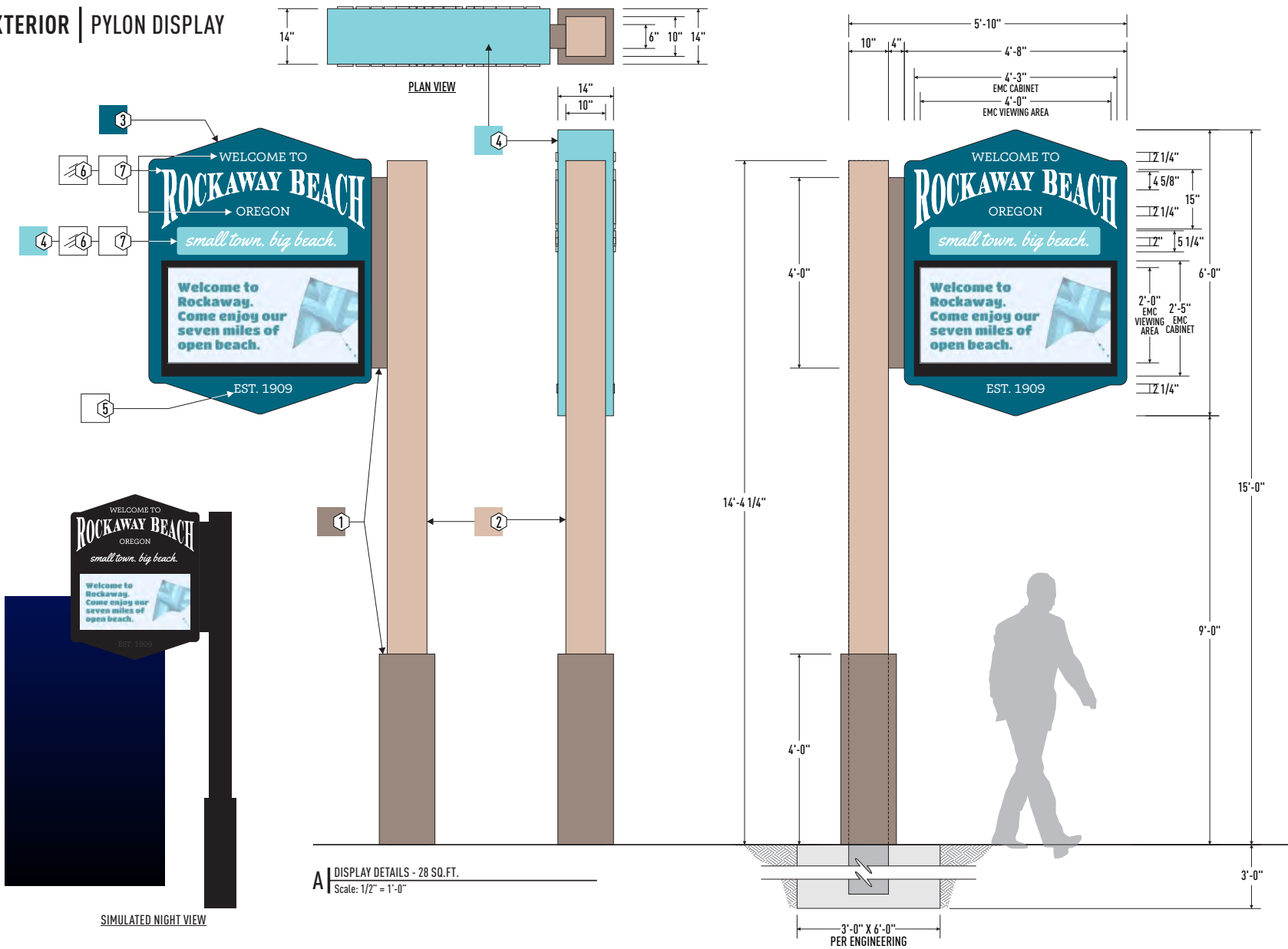
CITY CODE ALLOWANCE

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This sign is intended to be installed in accordance with the requirements of Article 101 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

Date: 09.06.2024
Drawing: 24-jw198r2M
Sheet: 1 of 4

EXTERIOR | PYLON DISPLAY



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Account Manager: Joseph Platt

Project Name

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Sign Type A
Illuminated.
Manufacture and install one (1) D/F pylon display w/ EMC's

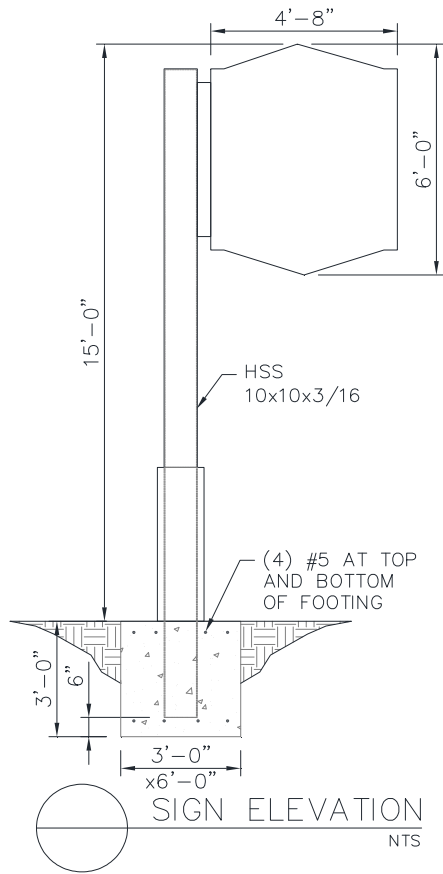
- 1 MAIN CABINET**
Construction: Fabricated aluminum, 14" deep, painted satin finish
Illumination: White LEDs.
- 2 Face: .090" routed aluminum painted satin finish**
Graphics: Push-thru 1/2" clear acrylic with 3M vinyl applied 1st surface and white diffuser 2nd surface
- 3 DIGITAL DISPLAY**
Watchfire 6MM LED RGB
Cabinet Size: 2'-5" H x 4'-3" L x 5" D
Viewing Area: 2'-0" H x 4'-0" L
Communication: 4G Wireless cellular plan
- 4 POLE COVER**
Construction: Fabricated aluminum, 14" deep, painted satin finish
- 5 INSTALLATION**
Pole: 10" H.S.S. post painted satin finish
Installation: Poured concrete footing, per engineering
Primary: One dedicated 120v/20amp circuit for sign(s) that supplies no other loads

Client Approval: _____

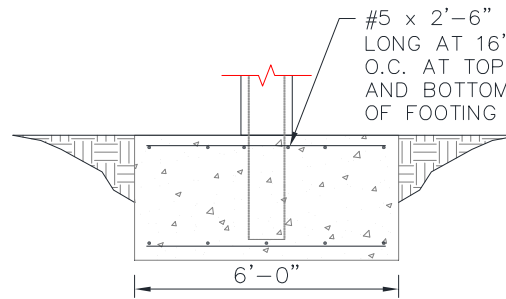
Landlord Approval: _____

| | | | | | | | | | | | | | |
|---------------------------|---|--|--|---|-------------------------------------|------------------------|--------------------------|----------------------------|--|---|------------------|----------------------|---------------|
| COLORS + MATERIALS | 1 MATTHEWS PAINT MP03337 GREY GELDING SATIN FINISH | 2 MATTHEWS PAINT MP04685 FOIE GRAS SATIN FINISH | 3 MATTHEWS PAINT MP00375 GUANTANAMO TEAL SATIN FINISH | 4 MATTHEWS PAINT MP08713 THALASSA SATIN FINISH | 5 MATTHEWS PAINT SATIN WHITE | 6 CLEAR ACRYLIC | 7 3M 230-20 WHITE | CITY CODE ALLOWANCE | © Copyright 2024 SecuritySigns, Inc. All Rights Reserved. Unauthorised use, reproduction, and/or display shall render the infringer liable for up to \$50,000 in statutory damages, plus attorneys fees and costs, for each infringement, under the U.S. Copyright Act 17 U.S.C. 417 & 504. | This sign is intended to be installed in accordance with the requirements of Article 101 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign. | Date: 09.06.2024 | Drawing: 24-jw198r2M | Sheet: 2 of 4 |
|---------------------------|---|--|--|---|-------------------------------------|------------------------|--------------------------|----------------------------|--|---|------------------|----------------------|---------------|

EXTERIOR | PYLON DISPLAY / ENGINEERING



Use a HSS 10X10X3/16 sign pole



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ISA INTERNATIONAL SIGN ASSOCIATION
WORLD SIGN ASSOCIATES
NORTHWEST SIGN COUNCIL

Account Manager: Joseph Platt

Project Name

ROCKAWAY BEACH
OREGON
small town. big beach.

276 US-101
Rockaway Beach, OR 97136

Client Approval: _____

Landlord Approval: _____

EXTERIOR | SIGN LOCATION PLAN

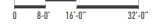


A

6'-9"
SIDEWALK
3'-0"

SITE PLAN

Scale: 1/32" = 1'-0"



COLORS + MATERIALS

CITY CODE ALLOWANCE

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This sign is intended to be installed in accordance with the requirements of Article 101 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

Date: 09.06.2024

Drawing: 24-jw198r2M

Sheet: 4 of 4

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Portland, Oregon 97202
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Account Manager: Joseph Platt

Project Name



276 US-101
Rockaway Beach, OR 97136

Client Approval: _____

Landlord Approval: _____

RESEARCH

Night-time Brightness Level Recommendations for On-Premise Electronic Message Centers

Updated August 2016

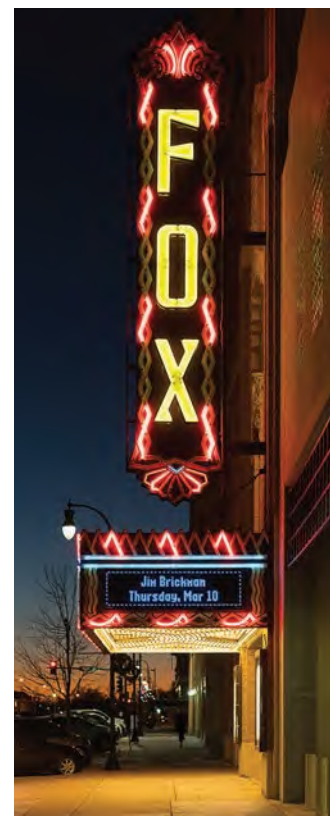
PRODUCED BY:



INTERNATIONAL SIGN ASSOCIATION

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LEARN MORE ABOUT EMCS

The International Sign Association offers an Electronic Message Center (EMC) Resource Center, with resources on:

- EMCs and traffic safety
- A framework for developing EMC sign code language
- The differences between EMCs and digital billboards

www.signs.org/local

ADDITIONAL SIGN CODE RESOURCES

The International Sign Association has developed numerous tools to help communities develop better sign codes. All are housed at www.signs.org/local, including:

- The Supreme Court ruling, *Reed v. Town of Gilbert*
- Model sign codes
- Best practices in regulating temporary and wayfinding signs
- The Economic Impact of On-Premise Signs

ISA's advocacy team is available to provide complimentary assistance on sign codes and sign-related issues.

Contact SignHelp@signs.org or 703.836.4012.

INTRODUCTION

ELECTRONIC MESSAGE CENTERS (EMCs)

Electronic message centers, or EMCs, continue to grow in popularity for business and community use. You may have heard EMCs being referred to as changeable message displays or digital signs.

EMCs are *not* digital billboards, which advertise a good or service that is located away from the sign. Rather, EMCs are digital signs that are located *on the premises*, and that advertise goods and services that are available at the location.



Electronic Message Center (EMC)/on-premise sign advertising a bank that is located on the same premises as the sign

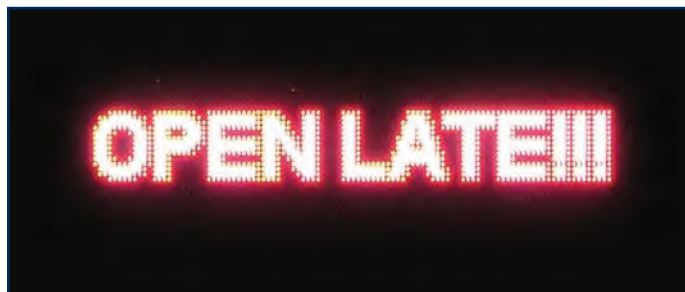


Digital billboard/off-premise sign advertising an automobile business in another location

There is often confusion regarding on- and off-premise digital signs. However, EMCs and digital billboards have very distinct capabilities and purposes, each targets a specific audience and each has traditionally been treated under separate legal and regulatory regimes, a zoning practice which was noted in the 2015 U.S. Supreme Court ruling in *Reed v. the Town of Gilbert*. For the purposes of this publication, we are focusing solely and exclusively on EMCs.

EMCs that are too bright at night can be offensive and ineffective. Night-time EMC brightness is an issue where sign users, the sign industry, and local offices have a common goal: ensuring that EMCs are appropriately legible. We know the messages that these signs convey can be rendered unattractive and perhaps even unreadable if they are programmed too bright.

That's why many sign companies recommend to their customers that in order for these signs to be most effective, their brightness be set at such a level to be visible, readable and conspicuous.



The International Sign Association (ISA) retained noted lighting expert Dr. Ian Lewin of Lighting Sciences to help the industry develop scientifically-researched, understandable recommendations for EMC brightness. Dr. Lewin was a past chair of the Illuminating Engineering Society of North America (IES), and was greatly respected within the lighting field. His work for ISA was conducted with the input of experts within the sign industry.

*As a result of his research, Dr. Lewin recommended two different brightness settings based on whether the EMC was located in an area of high or low ambient light. After field testing and utilizing Dr. Lewin's recommendations, it was determined that using the more conservative recommendation is appropriate in areas of both low and high ambient light. In order to simplify Dr. Lewin's recommendations, and to take a more reasonable approach to ensure that EMCs are sufficiently visible but not overly bright, **it is recommended that EMCs not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.***

The research and the recommendations contained in this report pertain only to EMCs, not traditionally internally illuminated signs, such as these channel letter and neon signs below. EMCs use a different lighting technology than most of these types of signs, and as such the scientific approach differs.

Community leaders should understand that, while it is recommended that brightness measurements be taken perpendicular to the sign, sign viewers rarely see the sign at that same perpendicular approach. At any viewing point away from or off the forward angle, the apparent brightness will be reduced. In other words, the measurements will capture the recommended brightness levels, but, unless viewers are looking at the sign directly perpendicular, they will not perceive the brightness at the full level.

We have provided recommended statutory language and tips to measure brightness with and without control of the EMC. If you need further assistance, feel free to contact ISA, signhelp@signs.org or at (703) 836-4012 to answer any of your EMC questions.



FOOTCANDLES VS. NITS: WHICH MEASUREMENT IS BETTER?

This document recommends communities adopt illumination measurements in footcandles as compared to nits. Here are a few reasons why more than 200 localities and many state departments of transportation have adopted the footcandle measurement for EMCs:

FOOTCANDLES

- Measures illuminance
- Accounts for ambient light conditions
- Luxmeter measuring device \$ 100
- "Twilight" measurement possible
- Measures light impact and appearance
- Works with roadway lighting standards
- Easier to check and enforce

NITS

- Measures luminance
- Measures only the amount of brightness emitted
- Luminance spectrometer (nit gun) - \$ 1,000
- Does not allow adjustment based on ambient light
- Does not measure appearance
- Difficult to measure accurately
- Difficult to enforce

* While the main advantage of using nits as compared to footcandles is that daytime measurement is possible, EMC brightness is typically more of an issue at night.

CASE STUDY: Columbus, Ohio



| | |
|-------------------------|--|
| COMMUNITY | Columbus, Ohio |
| POPULATION..... | 836,000 |
| LOCATION | As Ohio's largest city and state capitol, Columbus is the country's 15th largest city. |
| SPECIFIC EMC ISSUE..... | Crafting a reasonable, enforceable code that addresses complaints while preserving the ability for businesses to use what it termed automatic changeable copy signs. |

As automatic changing copy signs—as Columbus refers to EMCs—grew in use, so did community complaints.

By 2011, city planners began to edit the graphics codes to limit special effects. The goal was to continue to allow for a variety of commercial graphics, “but not at the expense of neighborhoods,” said Lisa Russell, the city’s Planner II who facilitated the code development project.

The city had in place certain limits on automatic changing copy signs, aka EMCs, in the graphics code, limiting their use to commercial and manufacturing zoning districts and requiring that only half of the sign could be used for the changeable copy. But signs lacked brightness limits and a hold time.

Russell led a team to draft the new code, which incorporated a brightness limit for both on-premise and off-premise signs. The testing method also is included in the code.

It was the result of much scientific discussion. “I believe that the best answer is revealed if you have enough information,” Russell said. The committee included a community group leader who was an architect specializing in lighting and representatives from the sign and graphics industry.

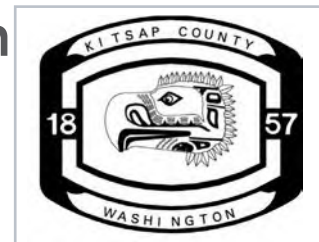
“When we started exploring brightness, it appeared the footcandle method was the way to go,” Russell said. “However, some group members wanted us to explore the luminance method. ISA believed so strongly that the luminance method was problematic that they brought a demonstration to us.”

The demonstration included a field trip to visit a sign to show the impact of the two measurement methods. “They wanted to make sure that we didn’t go down the wrong path. They rented a lift and showed us that with the luminance method you’d have to get up in the lift, raise it and shine the nit gun at the sign. With the footcandle meter, you can stand on the ground.”

Russell helped the group to see that the “members of the professional sign and graphics industry are not the same as end-users of signs, such as an owner of a carryout who wants to draw attention to his shop over others. We all had an interest in developing reasonable regulations instead of just banning these signs. We also did not want to take away the rights that businesses had to display electronic signs.”

The new code has significantly lessened complaints about sign brightness. And when a complaint is received, the code enforcement officers have a verifiable process for determining whether the sign complies with the code.

CASE STUDY: Kitsap County, Washington



| | |
|--------------------------|--|
| COMMUNITY | Kitsap County, Washington |
| POPULATION | 260,000 |
| LOCATION | Across the Puget Sound from Seattle and bordered by rural communities on the west. It is the third most densely populated county in the state. |
| SPECIFIC EMC ISSUE | Existing codes did not cover electronic signs. |

As a “transition” county between rural Washington and the metropolitan city of Seattle, Kitsap County had the challenges of creating regulations for electronic signs that fit the county’s dual personalities.

“The first step was to identify where these signs would be allowed,” said Darren Gurnee, a planner with the county. “We wanted to make sure these were restricted to areas of increased density and primarily non-residential use such as industrial zones and commercial zones within the urban growth area.”

Previously, the county had allowed electronic signs “as a matter of interpretation,” Gurnee said. Crafting more defined electronic sign regulations would provide a measure of stability—and help business owners know what was allowed and where. An added bonus: Gurnee felt the signs would be more attractive than the block letters signs that had to be changed manually.

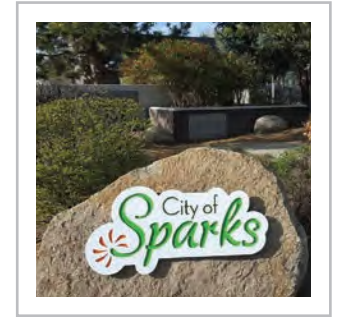
While the county wanted to make it easier for businesses to convert existing static monument signs into electronic signs, it also wanted to ensure that the regulations were not written in a way that would allow billboards to convert.

“We were able to craft our regulations in a way that required signs be brought into conformance before any change could be made,” Gurnee said. “Billboards were non-conforming, so that would not be an issue.”

ISA provided Gurnee with industry standards—contained in this publication—and some background on the technology that today’s electronic signs offer, such as automatic dimming. It also incorporated some of the recommended language on animation, hold times and transitions.

“The regulation is written in a way that it would be easy to enforce,” Gurnee said, and easy to understand, without the ambiguities contained in the previous method. The ending code created a perfect fit for both of the community’s personalities.

CASE STUDY: SPARKS, NEVADA



| | |
|------------------------------|---|
| COMMUNITY | Sparks, Nevada |
| POPULATION | 93,500 |
| LOCATION | A rapidly growing community, Sparks is located near Lake Tahoe, California, and Reno, Nevada, and is Nevada’s fifth largest city. |
| SPECIFIC EMC ISSUE | Existing regulations were difficult to enforce and outdated. |

Sparks, Nevada had existing regulations of electronic message centers—or electronic variable signs as the community deemed them. But “it wasn’t very explicit,” said senior planner Karen Melby. “The brightness standards were in lumens, which we didn’t even know how to measure.”

The regulations were outdated as well—having been drafted in 2002. Technology had changed dramatically and the costs of EMCs had dropped, putting them in the range of more businesses’ budgets. “We felt we could see more coming and felt that we needed to get a handle on it.”

As a first step, planners required that those seeking an EMC permit meet their standards before approval was granted, but nothing was written into the code. That method can create problems.

So Melby led the city through the code revision process. She sought out industry expertise from both the planning community and the sign and graphics industry. For industry insight, she turned to ISA. ISA provided feedback on how other communities were regulating electronic message centers, and recommendations on what was working for these communities.

One outside group felt strongly that the standards should be regulated in nits, not footcandles. They brought in an expert who opposed the proposed regulations. But Melby held strong on the issue of footcandles. “In my research, it seems like footcandle is what you can see with your eyes while a nit is pinpointing a spot on a sign. When you look at a sign, you’re looking at the whole thing, not just one small spot.”

The city adopted the widely recognized standard of 0.3 footcandles above ambient light, using the distance measurements outlined in this publication. Melby took that table, determined the formula and wrote the formula into the code.

The community allows smaller signs—those under 32 square feet—to include scrolling, while those larger do not.

The result has been a city that has successfully navigated the balance between business interests and community aesthetics. “We’ve had very few complaints,” Melby said. “When we do get a complaint about a sign being too bright, we go out and measure it. When they bring it down to standards, we don’t get complaints.”

Being able to use a simple light meter to measure brightness is far easier than simply guessing whether the sign is in compliance, Melby said. “The other method (measuring nits) was really based on opinion. What may seem bright to me may not seem bright to you. Now, we can say, ‘This is what the meter says.’”

By having clear standards that are easier to enforce, both community and business win.

EXECUTIVE SUMMARY

ISA ELECTRONIC MESSAGE CENTER NIGHT-TIME BRIGHTNESS RECOMMENDATIONS

This summary has been developed with an understanding that EMCs that are unreasonably bright are not effective for the communities or end users. This intends to help communities and stakeholders develop brightness standards for on-premise EMCs. The summary comprises:

- 1) *An overview of the importance of ensuring appropriate brightness,*
- 2) *Technology utilized to ensure appropriate brightness, and*
- 3) *Recommended brightness standards*

1. Overview of the importance of ensuring appropriate night-time brightness.

EMCs that are too bright at night can be offensive and ineffective. There are significant advantages to ensuring than an electronic display is not overly bright. These advantages include:

- » Conservation of energy
- » Increased life expectancy of the electronic display components
- » Building goodwill with the community
- » Ensuring the legibility of the display

It is in the best interest of all stakeholders to ensure that EMCs are sufficiently bright to ensure clear legibility, while at the same time avoiding a display that is overly bright.

2. Technology utilized to ensure appropriate brightness.

Most EMCs are designed to produce sufficient brightness to ensure clear legibility during daylight hours. However, daytime brightness settings are usually inappropriate for night-time viewing. The following general methods are used to dim an EMC for appropriate night-time viewing:

1. **Manual Dimming.** Using this method, the sign operator dims the display in response to changing ambient light conditions.
2. **Scheduled Dimming.** Sunset-sunrise tables allow an EMC to be programmed to dim at the same time that the sun sets and rises. This method is generally acceptable, but is more effective when used as a backup to automatic dimming controls capability, such as photocell technology.
3. **Photocell Technology.** An EMC that utilizes photocell technology can automatically dim as light conditions change. A photocell sensor alerts the display to adjust brightness according to ambient light conditions.

3. Recommended night-time brightness standards.

Dr. Lewin recommended the development of brightness criteria based on the Illuminating Engineering Society's (IES) well-established standards pertaining to light trespass, IES Publication TM-11-00. The theory of light trespass is based on the concept of determining the amount of light that can spill over (or "trespass") into an adjacent area without being offensive.

In order to simplify Dr. Lewin's recommendations, and to take a more reasonable approach to ensure that EMCs are sufficiently visible but not overly bright, **it is recommended that EMCs not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.**

Email signhelp@signs.org to receive Dr. Lewin's original research.



...it is recommended that EMCs not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.

RECOMMENDED LEGISLATIVE LANGUAGE



Electronic Message Center (EMC) Criteria: The night-time illumination of an EMC shall conform with the criteria set forth in this section.

A. EMC Illumination Measurement Criteria: The illuminance of an EMC shall be measured with an illuminance meter set to measure footcandles accurate to at least two decimals. Illuminance shall be measured with the EMC off, and again with the EMC displaying a white image for a full color-capable EMC, or a solid message for a single-color EMC. All measurements shall be taken as close as practical to a perpendicular plane of the sign at the distance determined by the total square footage of the EMC as set forth in the accompanying Sign Area of a Sign versus Measurement Distance table.

B. EMC Illumination Limits: The difference between the off and solid-message measurements using the EMC Measurement Criteria shall not exceed 0.3 footcandles at night.

C. Dimming Capabilities: All permitted EMCs shall be equipped with a sensor or other device that automatically determines the ambient illumination and programmed to automatically dim according to ambient light conditions, or that can be adjusted to comply with the 0.3 footcandle measurements.

D. Definition of EMC: A sign that utilizes computer-generated messages or some other electronic means of changing copy. These signs include displays using incandescent lamps, LEDs, LCDs or a flipper matrix.



SIGN AREA VERSUS MEASUREMENT DISTANCE

| AREA OF SIGN sq. ft. | MEASUREMENT (ft.) |
|-------------------------|----------------------|
| 10 | 32 |
| 15 | 39 |
| 20 | 45 |
| 25 | 50 |
| 30 | 55 |
| 35 | 59 |
| 40 | 63 |
| 45 | 67 |
| 50 | 71 |
| 55 | 74 |
| 60 | 77 |
| 65 | 81 |
| 70 | 84 |
| 75 | 87 |
| 80 | 89 |
| 85 | 92 |
| 90 | 95 |
| 95 | 97 |
| 100 | 100 |
| 110 | 105 |
| 120 | 110 |
| 130 | 114 |
| 140 | 118 |
| 150 | 122 |
| 160 | 126 |
| 170 | 130 |
| 180 | 134 |
| 190 | 138 |
| 200 | 141 |
| 220 | 148 |
| 240 | 155 |
| 260 | 161 |
| 280 | 167 |
| 300 | 173 |

* For signs with an area in square feet other than those specifically listed in the table (i.e., 12 sq ft, 400 sq ft, etc), the measurement distance may be calculated with the following formula: Measurement Distance = $\sqrt{\text{Area of Sign Sq. Ft.} \times 100}$

HOW TO MEASURE THE NIGHT-TIME BRIGHTNESS OF AN EMC WITH OPERATIONAL CONTROL

(Note: This method can be completed by one individual, but requires operational control to shutoff the EMC)

STEP 1

OBTAIN AN ILLUMINANCE METER.

Purchase or otherwise procure an illuminance meter. Most city/county traffic departments have an illuminance meter, which are also referred to as lux or footcandle meters (lux is the metric measure of illuminance; footcandles is the English measure of illuminance). The illuminance meter must have the ability to provide a reading up to two decimal places and must be set to read footcandles. It is preferred to have an illuminance meter with a screw-mount that allows the sensor to be mounted on a tripod. A tripod ensures that the highly sensitive sensor is held perfectly still; otherwise it may be difficult to obtain an accurate reading.

STEP 2

DETERMINE SQUARE FOOTAGE.

Determine the square footage of the face of the electronic message sign (EMC) by multiplying the height and width of the EMC. This information may be available in a permit application, or can be determined by physically measuring the height and width of the EMC. Do not include the sign face square footage attributable to any additional static signs associated with the EMC (if applicable).



STEP 3

DETERMINE THE MEASUREMENT DISTANCE.

Using the total square footage found in Step 2, look up the measurement distance in the table provided in the Recommended Legislative Language on page 8, to determine the distance to measure the brightness of the EMC. The distance should be measured perpendicular to the EMC sign face. The use of a measuring wheel, laser finder or a smartphone app are the most convenient ways to measure the distance.



STEP 4

PREPARE THE DISPLAY FOR TESTING.

Ensure that the EMC is programmed to alternate between a solid white (or in the case of a monochrome display – the solid color of the display) message and a blank message. The community may require that the sign owner cooperate with testing by programming the EMC for testing upon written notice.

STEP 5

USE AN ILLUMINANCE METER TO MEASURE THE BRIGHTNESS OF THE EMC.

Mount the sensor of your illuminance meter to a tripod and orient the sensor directly towards the face of the EMC at the measurement distance determined in Step 2.

Ensure that the illuminance meter is set to measure footcandles up to two decimal places. As the display alternates between a solid white message and an “off” message, note the range of values on the illuminance meter. If the difference between the readings is less than 0.3 footcandles, then the brightness of the display is in compliance. If not, the display will need to be adjusted to a lower brightness level using the manufacturer’s recommended procedures.



STEP 6

ENSURE THAT THE DISPLAY CAN ADJUST TO DIFFERENT AMBIENT CONDITIONS.

Inspect the sign to ensure that it incorporates a photocell or other technology to ensure that the display can adjust according to ambient lighting conditions.



As the display alternates between a solid white message and an “off” message, note the range of values on the illuminance meter.

If the difference between the readings is less than 0.3 footcandles, then the brightness of the display is in compliance.

HOW TO MEASURE THE NIGHT-TIME BRIGHTNESS OF AN EMC—WITHOUT CONTROL OF THE SIGN

(Note: This method requires two individuals, but does not require operational control of the EMC.)

There will be instances where the EMC illumination needs to be evaluated to ensure that it does not exceed the brightness levels established in the municipal sign ordinance. If the municipality is unable to obtain access to the sign controls or attempting to take the measurement after business hours, this method should be followed.

Unlike the six-step process described previously, this process measures the difference in brightness between the sign in operation and when the sign is completely blocked from the illuminance meter. This procedure is extremely simple and requires only an illuminance meter and a piece of painted cardboard cut to the proper size.

STEP 1

OBTAIN AN ILLUMINANCE METER.

(See previous Step 1)

STEP 2

DETERMINE SQUARE FOOTAGE.

(See previous Step 2)

STEP 3

DETERMINE THE MEASUREMENT DISTANCE.

(See previous Step 3 or use $\sqrt{(\text{Area of Sign in Sq. Ft.} \times 100)}$)

STEP 4

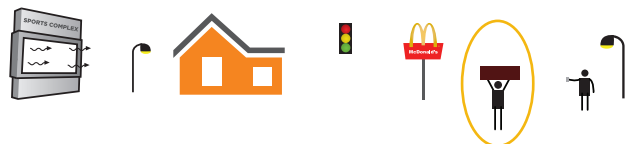
POSITION THE TESTERS.

Based on the size of the digital display, the person conducting the test should position themselves as close to directly in front of the digital display as practical, at the appropriate distance (calculated in Step 3).

A helper should position themselves about 7 ft. to 10 ft. in front of the light meter and hold up an opaque, black sheet of material that is roughly 12 in. high by 40 in. wide. (Regular cardboard painted matte black works well for this.) The sheet should be positioned so it blocks all light from the EMC, but still allows the remaining ambient light to register on the illuminance meter.

| EMC Area | Measurement Distance |
|---------------------|----------------------|
| 24 ft ² | 49 ft |
| 32 ft ² | 57 ft |
| 50 ft ² | 71 ft |
| 100 ft ² | 100 ft |

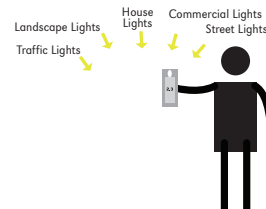
This helper should use a cardboard sheet to block the EMC light from the footcandle meter. This will establish the baseline footcandle reading.



After the cardboard block is held in place, a reading should be taken for the ambient light.

In this example, various light sources are impacting the photocell measuring 2.3 footcandles of ambient light.

This is the baseline for the measurement. Write it down.

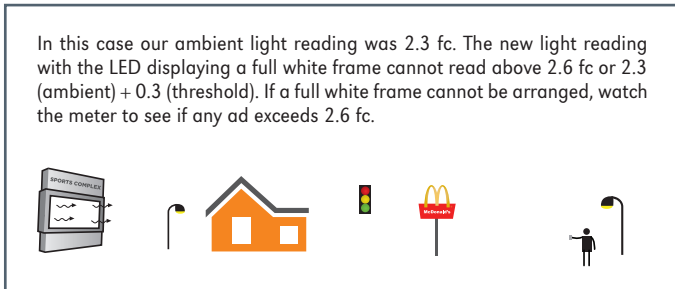


STEP 5

USE AN ILLUMINANCE METER.

The illuminance meter should be held at a height of about 5 ft. (which is approximately eye level) and aimed directly at the EMC. The illuminance meter will account for surrounding sources of light or the absence thereof.

In this case our ambient light reading was 2.3 fc. The new light reading with the LED displaying a full white frame cannot read above 2.6 fc or 2.3 (ambient) + 0.3 (threshold). If a full white frame cannot be arranged, watch the meter to see if any ad exceeds 2.6 fc.



At this point, readings should be taken from the illuminance meter to establish a baseline illumination level. (ISA recommends that the illuminance meter is capable of levels to 2 decimal places 0.00).

Once the baseline level is established, add 0.3 footcandles to the baseline level to calculate the max brightness limit. (For example: Baseline reading is 3.15 footcandles. The max brightness level is 3.45 footcandles.)

STEP 6

DETERMINE THE BRIGHTNESS LEVEL.

Remove the opaque sheet from blocking the EMC. Watch the foot-candle meter for 3 to 5 minutes to see if the max brightness level is exceeded by any of the images on the sign. If the readings do not exceed the max brightness levels, then the EMC illumination is in compliance.

If any of readings consistently exceed the max brightness level, the lighting level is not in compliance. In this scenario, the municipality will need to inform the sign owner of noncompliance and take appropriate steps to ensure that the EMC be adjusted to a lower brightness level using the manufacturer's recommended procedures.



If any of readings consistently exceed the max brightness level, the lighting level is not in compliance.



INTERNATIONAL SIGN ASSOCIATION

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On Premise Quote



QUOTE NUMBER: 2409317.1 (Revision 1) DATE: 6/28/2024

SIGN ID: 1918555 W6-S

Security Signs Inc 39400

Joseph Platt, Sales
2424 Se Holgate Blvd
Portland, OR 97202-4747
(503) 232-4172
joseph@securitysigns.com

Shipping Destination

Security Signs Inc
2424 Se Holgate Blvd
Portland, OR 97202-4747

Job Site

Name: Rockaway Beach City Hall
Address:
City: Rockaway Beach
State: Zip:

PRODUCT SPECIFICATIONS

| | |
|----------------------------|--|
| Pixel Pitch: | W6mm LED RGB |
| Pixel Matrix: | 96H X 192W |
| Ventilation Style: | Front Ventilation |
| Cabinet Size: | 29in H x 4ft 3in L x 5in D |
| Viewing Area: | 24in H x 4ft L |
| Cabinet Style: | Double Face (Slim) |
| Character Style: | 10 lines / 38.4 Characters at a 2" type |
| Approx. Weight: | 301.00 Lbs. |
| Warranty: | Standard 5 Year Watchfire warranty applies. |
| Mfg. Lead Time: | 3-5 weeks (Based on signed quote, receipt of deposit, and artwork approval - if applicable) |
| Electrical Service: | 120 VOLT 12.0 amps (6.00 per face) Single Phase Service. Refer to the Installation manual for details on wiring. Based on 18 hours of operation a day, plus or minus 10% depending on how the sign is programmed. <i>Example: 7.5 KWHrs a day x \$0.12 = \$0.90/Day</i> |


STANDARD FEATURES

| | |
|-------------------------|--|
| Brightness | Daytime 7500 NITs Maximum;Nighttime 700 NITs Maximum |
| Color | LED RGB |
| Color Capability | Min. 1.2 Quintillion |
| Includes | Ignite Graphics Software |
| Video | up to 30 FPS |
| Viewing Angles | 150 Horizontal/95 Vertical |

OPTIONS

| | |
|---------------------------|---|
| Software | Ignite OPx (cloud-based, single region) |
| Software Training | Web Based Software Training |
| Communications | OPx - 4G Wireless with Watchfire Cellular Data Plan |
| Wireless Data Plan | Life-of-sign Data Plan |
| Cabinet Separation | Standard Up To 15 Feet |
| Power Requirements | Standard As Quoted |
| Temperature Sensor | w/100-Step Photocell w/15 ft Cable |
| Sign Mounting Kit | Not Ordered / Not Required |
| Technician On-Site | Not Ordered |
| Warranty | Standard 5-Year Parts Warranty |


OPx REGISTRATION PROCESS

Watchfire's OPx software was included with this quote. Once the display is ordered, you will receive an email entitled "New Ignite OPx Display Registration .

 Forward this email to the primary software user. They will register through a quick and easy registration page.

When customers complete the registration process, they'll gain access to Ignite OPx to prepare content before their sign has been installed.

What's Expected

1. You will receive an email entitled "New Ignite OPx Display Registration .
 This email will contain a unique registration code and instructions.2. Forward the "New OPx Display" email to the primary software user (the sign operator responsible for managing the content on the display).
3. The primary software user will register their display.

Sign Dealer Action

Forward the "New OPx Display" email to the end customer.

DO NOT register the sign on the operator's behalf. The Registration code is one-time use.

Sign Operator Benefits

- The process is quick— only around 2 minutes.
- Sign Operators gain access and training to OPx early.
- A link to sign-up for training is included in the initial email.
- The display's size is set immediately, making content creation easy.
- Sign Operators can set the name of the display when registering.
- Sign Operators can name or create a domain (multi-display account) when registering.
- Sign Operators with existing accounts can add the new display to their account.

This registration code will also be printed on the inside cover of the software manual.
We strongly encourage you to have the sign operator register prior to installation.

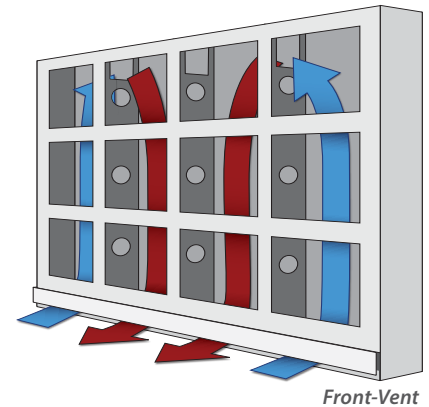
Watchfire cabinets are designed to minimize heat and provide durable protection from the elements. The rear side of our cabinet features mill-finish aluminum. Improperly ventilated signs risk overheating, which will affect the life and operation of the sign.

FRONT-VENT CABINETS AND PRICE WATCHER MODELS

Front-vent cabinets and Price Watcher models draw air through the bottom vents of the cabinet. It is important not to block the air intake, exhaust, or LED modules on the front face of these cabinets. There are no spacing requirements on the backs of front-vent signs.

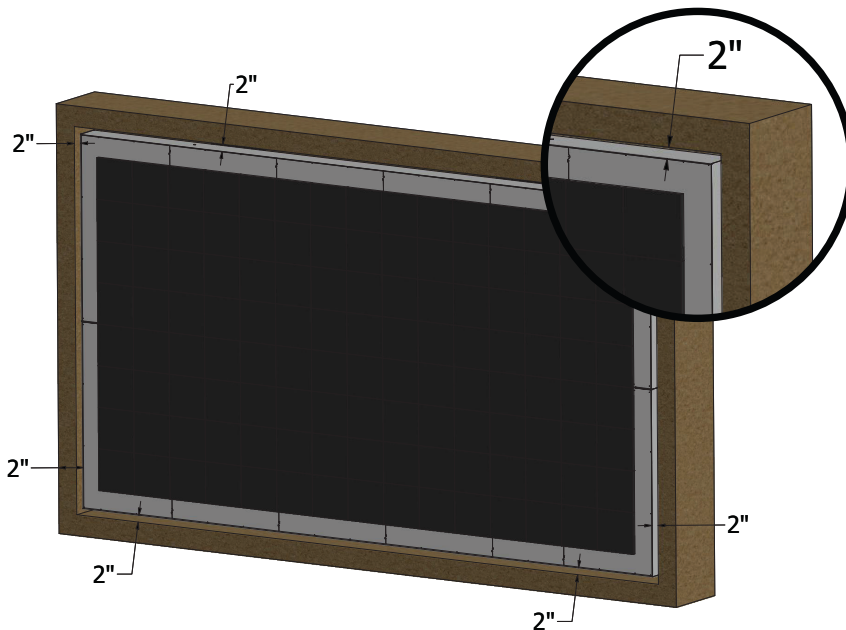
REAR-VENT CABINETS

Rear-vent cabinets draw air in through a vent at the bottom of the cabinet's rear side and use cooling fans inside the top to draw cool air up.



Rear-vented signs have several common requirements for **wall-mounted, monument, marquee, and pole/beam-mounted signs**. Single face signs up to 8' tall viewable need a minimum of 4" of clearance between the wall/mounting surface and the back of the sign. Double-faced signs need a minimum of 8" of clearance between the backs of both signs. Single face signs over 8' tall viewable need a minimum of 6" of clearance between the wall/mounting surface and the back of the sign. Double-faced signs need a minimum of 12" of clearance between the backs of both signs. Monument signs require an unobstructed air gap above, below, and to the sides of the sign face.

The amount of gap is based on the size of sign. Refer to the graphic and chart below. Proper air flow is critical for the health and longevity of the sign. The following is not permitted. Do not use horizontal members/clip angles mounted directly to the sign stringers that exceed 24" in length. Do not block the sign intake and exhaust vents on the back of the cabinet. If any of the above ventilation guidelines cannot be met, then adding fans external to the sign cabinet would be required to improve air flow.



| SIGN HEIGHT | PERIMETER AIR-GAP |
|-------------|-------------------|
| 4 ft | 2" |
| 5-6 ft | 3" |
| 7-8 ft | 4" |
| 9-10 ft | 5" |
| 11-12 ft | 6" |

It may be necessary to enclose the sides of a Rear-vent cabinet with sheet metal and other decorative materials. In these cases, perforated metal, louvers, and fans may be required to adequately ventilate a structure. 51% Net Free Area or better should be used. As such, it is the responsibility of the installer to guarantee proper ventilation of a sign structure.

For more information about your sign ventilation needs, go to watchfiresigns.com/ventilation-guide.

Watchfire Signs, LLC - TERMS OF SALE

Note. The following Terms of Sale are subject to change without notice. All transactions for all products sold by Watchfire Signs, LLC (“Watchfire”) are subject to the latest published Terms and Conditions and to any special Terms of Sale which may be contained in applicable Watchfire quotations and acknowledgements. Such Terms of Sale, the quotation from Watchfire to the applicable purchaser (“Buyer”), and Buyer’s purchase order accepted by Watchfire collectively comprise the “Agreement.” In the event of any conflict or inconsistency between any document forming part of the Agreement, the following order of priority shall apply: (i) first, any addendum or amendment to a quotation or purchase order which is executed by each of Watchfire and Buyer; (ii) second, Watchfire’s quotation; (iii) third, these Terms of Sale; (iv) fourth, any other written agreement (including any “click through” agreement provided by Watchfire with respect to the Software (as defined below)); and (v) lastly, Buyer’s purchase order accepted by Watchfire. For purposes of clarity, Watchfire rejects any and all modified or additional terms within Buyer’s purchaser order.

Quotation. Quotation shall be valid for no more than forty-five (45) days from their date, unless otherwise stated in the Quotation. All quotations are subject to change by Watchfire at any time upon notice to Buyer. Buyer is obligated to review the Quotation carefully and to immediately advise Watchfire of any discrepancies or errors. Changes to the products or services supplied by Watchfire (the “System”) after acceptance of a quotation are valid only when accepted in writing and signed by both Watchfire and Buyer.

Terms of Payment. Upon Buyer’s execution of a Quotation, Buyer shall make a non-refundable minimum deposit of one-half of the System Price reflected in such Quotation. The remainder of the System Price must be paid by Buyer no later than ten (10) Business Days prior to the Shipment Date. The System Price does not include any construction or installation of the System (unless otherwise contemplated by the Quotation and the Scope of Work incorporated therein), which are solely the responsibility of Buyer. In the event Buyer fails to timely pay Watchfire any amount owing pursuant to the Agreement, Watchfire may, in its sole and absolute discretion: (a) suspend its performance pursuant to the Agreement until all such payment obligations are fulfilled; (b) suspend or cause to be suspended System access, which may not be restored until all such payment obligations are fulfilled; (c) charge to Buyer interest on any unpaid amount at the rate equal to the lesser of eighteen percent (18%) per annum or the maximum amount permissible pursuant to applicable law; and (d) recover any amounts owing to Watchfire by Buyer from any amounts paid by Buyer to Watchfire (including any down payment). Each of the foregoing remedies are cumulative and not exclusive of each other. In addition to amounts otherwise owing by Buyer (including any interest assessed by Watchfire pursuant to the Agreement), Buyer also agrees to pay all of Watchfire’s fees and costs of collection including, without limitation, Watchfire’s attorneys’ fees and costs.

NSF Payment. The issuance of any check, electronic check or ACH transfer by Buyer that is returned by Buyer’s bank as not honored for payment for any reason shall incur an additional charge of \$100.00. All fees and charges created by such dishonored payment shall be immediately due. In the event of any dishonored payment of Buyer, future checks, electronic check or ACH transfer from Buyer may not be accepted as payment for future orders, in Watchfire’s sole discretion.

Title; Risk of Loss; Delivery. Watchfire shall, at Buyer’s sole cost, arrange for delivery of the System to Buyer. Without limiting the foregoing, Watchfire may estimate but Buyer shall be solely responsible for shipping and delivery costs. Shipping and delivery of the System is performed by third parties and Watchfire is not responsible for any delays in shipment that are beyond Watchfire’s control. Title to, and risk of loss of, the System shall pass to Buyer upon Watchfire’s placement of the System with the shipping carrier unless the System has been in Watchfire’s warehouse for more than thirty (30) days from the date of completion. Title and risk of loss of the System shall automatically pass to Buyer if the System is in Watchfire’s warehouse for more than thirty (30) days and a storage fee of \$500 per month thereafter will be assessed to Buyer. If Buyer elects to pick up the System at Watchfire’s facility, title and risk of loss of the System shall automatically pass to Buyer once the System is completed by Watchfire and a storage of \$500 per month thereafter will be assessed to Buyer. Buyer shall inspect the System within fourteen (14) calendar days after receipt of delivery of the System (the “Inspection Period”). Buyer will be deemed to have accepted the System unless it notifies Watchfire in writing of any Nonconforming System during the Inspection Period and furnishes such written evidence or other documentation as reasonably required by Watchfire. “Nonconforming System” means only the following: (i) product shipped is different than identified in Buyer’s purchase order; or (ii) product’s label or packaging incorrectly identifies its contents. If Buyer timely notifies Watchfire of any Nonconforming System, Watchfire shall, in its sole discretion, (i) replace such Nonconforming System with a conforming System or (ii) credit or refund the price for such Nonconforming System. If Watchfire exercises its option to replace the Nonconforming System, Watchfire shall deliver a conforming System to Buyer according to the delivery terms applicable to the original System. Buyer acknowledges and agrees that the remedies set forth in this paragraph are Buyer’s exclusive remedies for the delivery of a Nonconforming System.

Driver Detention. Fees for up to two (2) hours of detention time, per load, are included in the System Price. In the unlikely event that the driver is delayed or detained beyond two (2) hours following arrival at the shipping destination, detention fees will be accrued by the hour. These fees will be invoiced to Buyer in a timely manner and will not exceed \$75.00/hour.

Force Majeure. Watchfire shall not be liable for any damages as a result of any delays due to any causes beyond Watchfire’s control, including, without limitation, telecommunications failures, technology attacks, epidemic, pandemic, embargoes, quarantines, viruses, strikes, labor problems of any type, accidents, fires, war, acts of terrorism, material unavailability, natural disaster, transportation failures,

instability and unavailability of the Internet, and acts of God, etc. In the event of any such delay, the date of delivery shall be extended for a period of time reasonably necessary to cover the effect of such delay.

Intellectual Property. Watchfire shall defend any suit or proceeding brought against Buyer to the extent such suit or proceeding is based on a claim that equipment furnished by Watchfire as part of the System constitutes an infringement of any copyright, trademark or patent of the United States as of the time of shipment by Watchfire. Watchfire retains ownership of intellectual property in any materials, goods, software and production process which may be developed under this Agreement.

Use of System Image. Buyer agrees that Watchfire, without compensation to Buyer, may use Buyer's name along with photographs and images of the System in Watchfire's advertising and promotional materials in any media worldwide without the prior written consent of Buyer.

License for Software Use and Warranty. Watchfire hereby grants the Original End User a limited, non-exclusive personal, non-transferable and non-assignable license to use the Software (the "License"). "Software" as used herein includes software distributed on a media (like a CD, DVD or flash drive), software hosted on a server and accessed through a web browser, and software running on the System controllers. Media does not apply to Ignite OA. The License covers end-user applications such as Ignite OP, Ignite OPx and Ignite OA. The License terminates upon any breach by Buyer or its permitted assignee of these Terms of Sale or the Agreement, and Watchfire reserves the right to electronically disable the Software upon such violation. Excluding third party software, Watchfire warrants that, for a period of sixty (60) days after shipment by Watchfire: (i) the media (if any) on which Software is provided shall be free from material defects; and (ii) Software substantially conforms to the documentation that accompanies it. The foregoing warranties are the sole and exclusive warranties provided by Watchfire with respect to the Software. The Software is copyrighted by Watchfire and Buyer shall not permit the Software to be copied (except for backup purposes), transferred, distributed, disassembled, reverse engineered, decompiled or tampered with. Watchfire does not warrant that the media and Software are completely error-free, will operate without interruption or are compatible with all equipment or software configurations. Watchfire may charge additional fees for any upgrades or modifications to the Software.

Third Party Software. Operation of the sign equipment included in the System is supported only with Watchfire software and Watchfire qualified versions of approved third party software. Installing un-supported software on sign controllers could lead to non-operational signs for which no warranty applies. Service charges for troubleshooting and returning to operation will apply.

System Warranty. When used properly under normal use and normal environmental conditions, and subject to the exclusions set forth herein and exceptions set forth in an applicable quotation, Watchfire warrants the System (other than the Software, described above) against material defects in material and workmanship for the following durations: (i) five (5) years from the date of shipment from Watchfire's facility with respect to equipment manufactured by Watchfire. Notwithstanding anything to the contrary, the warranty with respect to equipment sold by Watchfire and manufactured by third parties shall be subject only to the terms of the applicable manufacturer's warranty and Watchfire disclaims any additional warranty with respect thereto. For equipment manufactured by Watchfire, Watchfire's only obligation and liability is to repair or provide replacement parts (at its option) for those part(s) of the System which prove to be defective and not merely worn out (e.g., aged LEDs). For purposes of clarity, Watchfire is not responsible for the labor to remove or install repaired or replaced parts. Repaired or replaced parts provided within the original warranty period shall have the same warranty for the balance of the original warranty period. Parts replaced or repaired outside of any warranty period shall have a warranty of replacement only for material defects in material or workmanship for one (1) year from date of shipment. Any parts not manufactured by Watchfire, but which are added to or incorporated in the System manufactured by Watchfire, are covered only by their original manufacturer's warranty, if any. Watchfire is not responsible for telecommunications or Internet services being unavailable, or for limitations caused by environmental conditions or incompatibilities with other systems.

Limitations. Buyer's exclusive remedy for Watchfire's breach of the Agreement as to any term thereof, and Watchfire's only liability for any such breach, shall be replacement or repair of the System and its parts actually delivered to Buyer in Watchfire's sole discretion. **WATCHFIRE'S LIABILITY TO BUYER UNDER THE AGREEMENT (INCLUDING THESE TERMS OF SALE) OR FOR THE SYSTEM OR SOFTWARE IS LIMITED AS SET FORTH HEREIN, WHETHER SUCH LIABILITY IS IN CONTRACT, TORT, OR ANY OTHER THEORY OF LIABILITY, INCLUDING BUT NOT LIMITED TO FRAUD, MISREPRESENTATION, BREACH OF CONTRACT, PERSONAL INJURY, PRODUCTS LIABILITY OR ANY OTHER THEORY. WATCHFIRE SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, EXEMPLARY, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, OR DAMAGES FOR LOSS OF USE, LOSS OF ANTICIPATED PROFITS, INCOME, OR ECONOMIC LOSSES OF ANY KIND. BUYER MAY NOT BRING ANY ACTION UNDER THE AGREEMENT (INCLUDING IN CONNECTION WITH ANY BREACH OF WARRANTY) MORE THAN ONE YEAR AFTER THE CAUSE OF ACTION HAS ACCRUED. WITHOUT LIMITING ANY OTHER LIMITATION ON LIABILITY HEREUNDER, IN NO EVENT WILL WATCHFIRE BE LIABLE TO BUYER FOR LOSS, DAMAGE, OR INJURY OF ANY KIND OR NATURE ARISING OUT OF THE AGREEMENT IN EXCESS OF THE SYSTEM PRICE ACTUALLY PAID TO WATCHFIRE BY BUYER.** Buyer agrees that these limitations on liability and remedies are independent of the agreed remedies under this Agreement.

WATCHFIRE'S LIABILITY UNDER ANY WARRANTY HEREUNDER, WHETHER EXPRESS OR IMPLIED, SHALL NOT EXCEED THE COST OF REPAIR OR REPLACEMENT OF DEFECTIVE PARTS OF THE SYSTEM AND SOFTWARE. Significant surge protection is included in the sign equipment included in the System. However, very high electrical surges can damage electronic LED sign systems and are not covered by warranty. **Proper installation to allow for adequate ventilation as detailed in the Installation Manual S-1504 is required to keep the warranty in force. Failure to comply with the requirements set forth in the applicable installation or operating manual will result in the warranties**

associated with the System being void. Power must be applied at all times except for during service incidents. Power outages for more than three (3) days require notice to Watchfire Service to keep the warranty in force.

Warranty Service. Defective media or Software may be replaced during the warranty period unless damaged by accident or misuse. WATCHFIRE'S ENTIRE LIABILITY SHALL BE THE REPAIR OR REPLACEMENT OF THE DEFECTIVE MEDIA OR SOFTWARE WHEN TIMELY RETURNED TO WATCHFIRE. Any replacement media or Software has the remainder of the same sixty (60) day warranty applicable to the Software and the media (if any) on which Software is provided. Warranty service for the System and the Software are expressly conditioned on Watchfire's prior receipt of all payments due under the Agreement, including the System Price. Buyer shall contact the Watchfire's Helpdesk for warranty service. Items determined defective by Watchfire will be replaced at Watchfire's option with new or like-new parts. No credit is given for such items. Watchfire will pay for outbound shipping and return ground freight for items repaired or replaced for its manufactured goods. Buyer must pay all duties and taxes for items shipped to destinations outside of the continental United States. Buyer shall pay for the installation of repaired or replaced items and updates to the Software. In the event of any delay in Watchfire's performance beyond Watchfire's reasonable control, Watchfire shall have additional reasonable time for performance. Buyer shall be responsible and pay for all maintenance services.

10-Year FCC Guarantee. This device complies with FCC Part 15 regulations for Class A devices. Operation is subject to the following two conditions: (i) the device may not cause harmful interference; and (ii) the device must accept any interference received, including interferences that may cause undesired operation. FCC regulations state that unauthorized changes or modifications to the device could void the user's authority to operate it.

In the event of a documented claim of electromagnetic interference during the System warranty period as the result of the operation of the System in accordance with Watchfire's operating instructions, Watchfire shall provide a remedy to the complaint pursuant to FCC Part 15 regulations for Class A devices in effect at the time of shipment or issue a prorated refund to Buyer. The prorated refund will be determined by dividing the original purchase price by the number of months of the System warranty period, then multiplying the result by the months remaining in the System warranty period. Partial months are rounded to the nearest whole month.

Indemnification. BUYER SHALL, AND SHALL CAUSE ITS END USER(S) TO, INDEMNIFY WATCHFIRE AND ITS AFFILIATES FOR, AND HOLD SUCH PERSONS AND ENTITIES HARMLESS FROM AND AGAINST, ANY CLAIM, LOSSES, DAMAGES, COSTS, AND EXPENSES (INCLUDING WATCHFIRE'S ATTORNEYS' FEES) WITH RESPECT TO THE USE OF THE SOFTWARE OR SYSTEM, INCLUDING WITH RESPECT TO THE SOFTWARE OR SYSTEM INFRINGING ANY INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY DUE TO AN IMAGE DISPLAYED ON THE SYSTEM.

Exclusions. THE WARRANTIES EXPRESSLY WRITTEN IN THE AGREEMENT (INCLUDING THESE TERMS OF SALE) ARE THE SOLE AND EXCLUSIVE WARRANTIES GIVEN BY WATCHFIRE WITH RESPECT TO THE SYSTEM AND THE SOFTWARE AND ARE IN LIEU OF AND EXPRESSLY EXCLUDE ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE WHETHER OR NOT THE PURPOSE OR USE HAS BEEN DISCLOSED TO WATCHFIRE AND WHETHER OR NOT THE SYSTEM OR SOFTWARE IS SPECIFICALLY DESIGNED AND/OR MANUFACTURED BY WATCHFIRE FOR BUYER'S USE OR PURPOSE, AGAINST INTELLECTUAL PROPERTY INFRINGEMENT, OR OTHERWISE. The warranties in these Terms of Service or elsewhere in the Agreement do not apply if the System or Software is damaged due to improper or unreasonable use, modification, repair, service, installation, or environmental conditions or if they are reversed engineered, de-compiled or used to create derivative works. There are no express warranties for the System and the Software beyond those expressly stated herein and the entire agreement between the parties as to warranties is embodied in the Agreement (including these Terms of Sale). Neither oral statements or advice made by Watchfire's agents or employees in the selection of goods or parts used in or in conjunction with Watchfire's manufactured goods, or in the performance of warranty services, nor any verbal arrangement, nor any advertising material or statement in any brochure, catalogue, or other material furnished by Watchfire or on its behalf, nor any other oral or written term or statement not contained herein shall constitute a warranty, be relied upon by Buyer, or become a part of the agreement with respect to the System or the License. If any sample or model was shown to Buyer, such sample or model was used merely to illustrate the general type and quality of a System and Software and does not represent that the System and Software will necessarily conform to the sample or model.

Privacy Policy. See <http://www.watchfiresigns.com/privacy-policy> for details.

Miscellaneous. Should any part of these Terms of Sale be found invalid, the other parts shall remain unaffected and shall be enforceable. These Terms of Sale shall be governed by the laws of the State of Illinois. Any litigation arising out of or relating in any way to the Agreement (including these Terms of Sale) shall be exclusively in Vermilion County, in the State of Illinois or the U.S. District Court for the Central District of Illinois.