

MOMENT FACTORY

WE DO IT
IN PUBLIC



City of Winnipeg : Cultural District Luminous identity

RFP SPECIFICATIONS
JULY 27TH 2012

© 2012 MOMENT FACTORY

The concepts and all visuals presented in this document remain the intellectual property of Moment Factory.

MOMENT FACTORY

6250 HUTCHISON, SUITE 200A
MONTRÉAL, QUÉBEC, H2V 4C5

AMAHL HAZELTON

E AMAHL@MOMENTFACTORY.COM
I 514 843-8433 #127
C 514 515-5504

Table of Contents

GENERAL NOTES	3
PART 1 LIGHT PRISM CONSTRUCTION AND FINISHES	
PR-01 FRONT FACE PANEL	5
PR-02 INTERNAL DIFFUSING STRUCTURE	6
PR-03 REAR REFLECTOR	7
PR-04 EDGE TRIM	8
PR-05 VISIBLE FIXINGS	9
PR-06 INTERNAL FIXINGS	9
PART 2 SUPPORT STRUCTURE & BRACKETRY	
ST-01 BASE	11
ST-02 A/D PRISM SUPPORT STRUCTURE	11
ST-03 MOUNTING BRACKET	12
ST-04 EXTERIOR EQUIPMENT HOUSING	12
PART 3 LIGHTING & CONTROL EQUIPMENT	
CT-01 LIGHT SIGNAL OUTPUT SPLITTER	14
CT-02 LOCAL TRANSFORMER & DATA DECODER	14
CT-03 DOT PIXEL LED VIDEO FIXTURE	15

GENERAL NOTES

INTRODUCTION

The following specification is designed to be read in conjunction with design drawings and is to subsequently form the construction and manufacturing procurement process. This document is intended to express the design intent and required material finishes, equipment specifications and basic information at design stage. Should there be any inconsistencies, omissions or other issues please contact the relevant team member at Moment Factory.

SAMPLES

Where requested, the fabricator is required to provide material samples, mock-ups or photographs. These are to be submitted to the lead designer(s) for approval for or in liaison with Moment Factory. The approval process usually takes 48 hours.

PART 1

**LIGHT PRISM CONSTRUCTION
AND FINISHES**

Part 1

LIGHT PRISM CONSTRUCTION AND FINISHES

PR-01 FRONT FACE PANEL

Refer to photographs on page 17 for desired effect.

- Weather-resistant and UV-resistant front surface material.
- Polycarbonate-based planar material cut to fit.
- Forms weather resistant protection to other internal equipment.
- Material must act as both diffuser for lighting element and also as a 2-way mirror.
- This will allow the front face to be reflective when no illumination is present, but allow a diffused backlight to be seen when illumination is on.
- Diffusion layer must also offer good light transmission comparable to 3-5mm Perspex 030 @ 70mm from light source.

PRODUCT OPTIONS:

OPTION 1

4 or 5mm Plaskolite See-Thru Mirror polycarbonate laminated to a secondary polycarbonate layer with at least 70% light transmission on underlying diffusion layer (eg. Makrolon LD).

OPTION 2

Diffusing polycarbonate (eg. Makrolon LD) with at least 70% light transmission with a 2-way mirror coating. Coating can either be a thermally applied film coating or a vacuum vaporized coating.

OPTION 3

Shatter-resistant coated glass with laminated diffusing interlayer. Vacuum vaporized metal coating allows light transmission and reflectivity based on light contrast.

Quantity: 80

Supplier: To be specified by the fabricator with material approval by Moment Factory

Drawing Ref: A (10) 01

Part 1

LIGHT PRISM CONSTRUCTION AND FINISHES

PR-02 INTERNAL DIFFUSING STRUCTURE

- Weather-resistant and UV-resistant bonded or interlocking structure capable of diffusing and reflecting internal light source.
- Powder-coated corrosion-resistant steel or polycarbonate reflector.

PRODUCT :

Grade 316 Stainless Steel

Ready-made options include:
White Optics Metal

Genesis Plastics

Quantity: 80

Supplier: To be specified by the fabricator with material approval by Moment Factory

Drawing Ref: A (10) 02

Part 1

LIGHT PRISM CONSTRUCTION AND FINISHES

PR-03 REAR REFLECTOR

- Weather-resistant mechanically fixed stainless steel structure capable of diffusing and reflecting internal light source. Rear (visible face to be finished with a brushed finish).
- Inner Face: Powder-coated corrosion-resistant stainless steel or polycarbonate reflector.
- Outer Face: Weather resistant (capable of resisting the local climate without pitting or rusting) stainless steel grade 304 or 316 with a uniform multi-directional mechanically brushed finish to achieve a dull diffused reflection.

PRODUCT :

Grade 316 Stainless Steel

Ready-made options include:
White Optics Metal

Genesis Plastics

Quantity: 80

Supplier: To be specified by the fabricator with material approval by Moment Factory

Drawing Ref: A (10) 03

Part 1

LIGHT PRISM CONSTRUCTION AND FINISHES

PR-04 EDGE TRIM

- Visible edge trim fixing
- Inner Face: Powder-coated corrosion-resistant stainless steel or polycarbonate with a light reflecting and diffusing layer.
- Outer Face: Weather resistant (capable of resisting the local climate without pitting or rusting) stainless steel grade 304 or 316 with a uniform multi-directional mechanically brushed finish to achieve a dull diffused reflection.

PRODUCT :

Brushed stainless steel resistant the local exterior conditions

Suggested product: Rimex Super-Mirror Grade 316 Stainless Steel

Quantity: 80

Suggested Supplier: Rimex

To be specified by the fabricator with material approval by Moment Factory

Part 1

LIGHT PRISM CONSTRUCTION AND FINISHES

PR-05 VISIBLE FIXINGS

- All visible fixings to be specified by the fabricator and submitted for approval to Moment Factory.
- Visible fixings are to be kept to an absolute minimum and where possible matching material finishes.
- Where feasible, headless or flush fittings are to be used.
- Visible fixings are anti-oxidizing

PR-06 EXTERNAL FIXINGS

- All internal fixings to be specified by the fabricator for approval to Moment Factory to correlate with the design intent for each material finish.

PART 2

SUPPORT STRUCTURE &

BRACKETRY

Part 2

SUPPORT STRUCTURE & BRACKETERY

ST-01 BASE

- Piling foundation or freestanding base
- Sizing and welding have to be specified by an engineer in collaboration with local engineers.

Quantity: 20

**To be specified by local engineers in collaboration with Moment Factory.
NOT PART OF RFP - FOR INFORMATION ONLY**

ST-02 PRISM SUPPORT VARIATION

▪ Tubular steel welded support structure constructed and finished to resist local weather conditions. Each support structure consists of a vertical mast with 4 welded arms at various angles. Hand hole ring comes with cover. All poles to be prewired for electrical and CAT6 connections.

▪ Mild Steel. All steel shall be hot dip galvanized after fabrication as per CSA G164M-1992. The silicon content of the galvanized steel shall be $Si \leq 0.04\%$ or $0.15\% \leq Si \leq 0.25\%$. The following codes to be met:

- (i) CAN/CSA-G164-M92 (R2003) Hot Dip Galvanizing
- (ii) CAN3-Z299.3-85 (R2003) Quality Assurance Program

▪ All welding per CSA W59 200.3

▪ Paint finish to be powder coated with anthracite grey finish, submitted to Moment Factory for approval.

(4 variations)

ST-02A

ST-02B

ST-02C

ST-02D

Total Quantity: 20

Prism support variations

ST-02A

Vertical Post Height	3800mm
Vertical Post Diameter	3 inches
Number of arms	4
Horizontal Spread of Arms	1000-2250mm
Arm Heights	Varies (TBC)
Arm Angles	Varies (TBC)
Arm Diameter	2 inches
Quantity	+/- 5 (qte to confirm)

ST-02C

Vertical Post Height	4600mm
Vertical Post Diameter	3 inches
Number of arms	4
Horizontal Spread of Arms	1000-2250mm
Arm Heights	Varies (TBC)
Arm Angles	Varies (TBC)
Arm Diameter	2 inches
Quantity	+/- 5 (qte to confirm)

ST-02B

Vertical Post Height	4200mm
Vertical Post Diameter	3 inches
Number of arms	4
Horizontal Spread of Arms	1000-2250mm
Arm Heights	Varies (TBC)
Arm Angles	Varies (TBC)
Arm Diameter	2 inches
Quantity	+/- 5 (qte to confirm)

ST-02D

Vertical Post Height	5000mm
Vertical Post Diameter	3 inches
Number of arms	4
Horizontal Spread of Arms	1000-2250mm
Arm Heights	Varies (TBC)
Arm Angles	Varies (TBC)
Arm Diameter	2 inches
Quantity	+/- 5 (qte to confirm)

To be specified by the fabricator with approval by Moment Factory.

Drawing Ref: A (20) 01

Part 2

SUPPORT STRUCTURE & BRACKETERY

ST-03 MOUNTING BRACKET

- Light Prism mount connecting onto ST-02 Tubular Steel Welded support structure allowing rotation of Light Prism in three axes and locking of position for structural rigidity.
- Finished in weather-resistant materials (exterior grade).

Quantity: 80

Suggested Supplier: Ram Mount

To be specified by the fabricator with material approval by Moment Factory

ST-04 EXTERIOR EQUIPMENT HOUSING

- IP67 Housing mounted at ground level with minimal visual impact (i.e. AC/DC transformers and local data decoders).

Quantity: 20

**To be specified by local engineers in collaboration with Moment Factory.
NOT PART OF RFP - FOR INFORMATION ONLY**

PART 3

LIGHT SIGNAL & CONTROL

EQUIPMENT

Part 3

LIGHTING & CONTROL EQUIPMENT

CT-01 LIGHT SIGNAL OUTPUT SPLITTER

- Data splitter/converter connected to show control computer data output (Video) to 20 separate data locations

Localisation in the control room.

To be specified by the fabricator with material approval by Moment Factory

Drawing Ref: AV (01) 01

CT-02 LOCAL TRANSFORMER & DATA DECODER UNIT

- As part of the lighting control system and power requirements a local power transformer is to be located in ST-04, at the base of each ST-02 support to supply 4no. light prism with power and data.

To be specified by local engineers in collaboration with Moment Factory.

Drawing Ref: AV (01) 01

Part 3

LIGHTING & CONTROL EQUIPMENT

CT-03 DOT PIXEL LED VIDEO FIXTURE

- RGB VIDEO individually controllable full colour video nodes integrated into light prism (six per light prism).

**Items to be located in LIGHT PRISM MODULE
(PR-01 to PR-06)**

PRODUCT :

3W total output per node
SMD050 LED Chips (Cree, Osram or Nichia ; Nichia is the preferred supplier of LED chip for external usages)
Smooth dimming control
Data input via video
All connections and encapsulated
Electronics certified IP65 or equivalent
Electronics certified ETL, CSA, ULc
Control schematics to be proposed

Supplier: To be specified by local engineers in collaboration with Moment Factory.

Drawing Ref: AV (01) 01

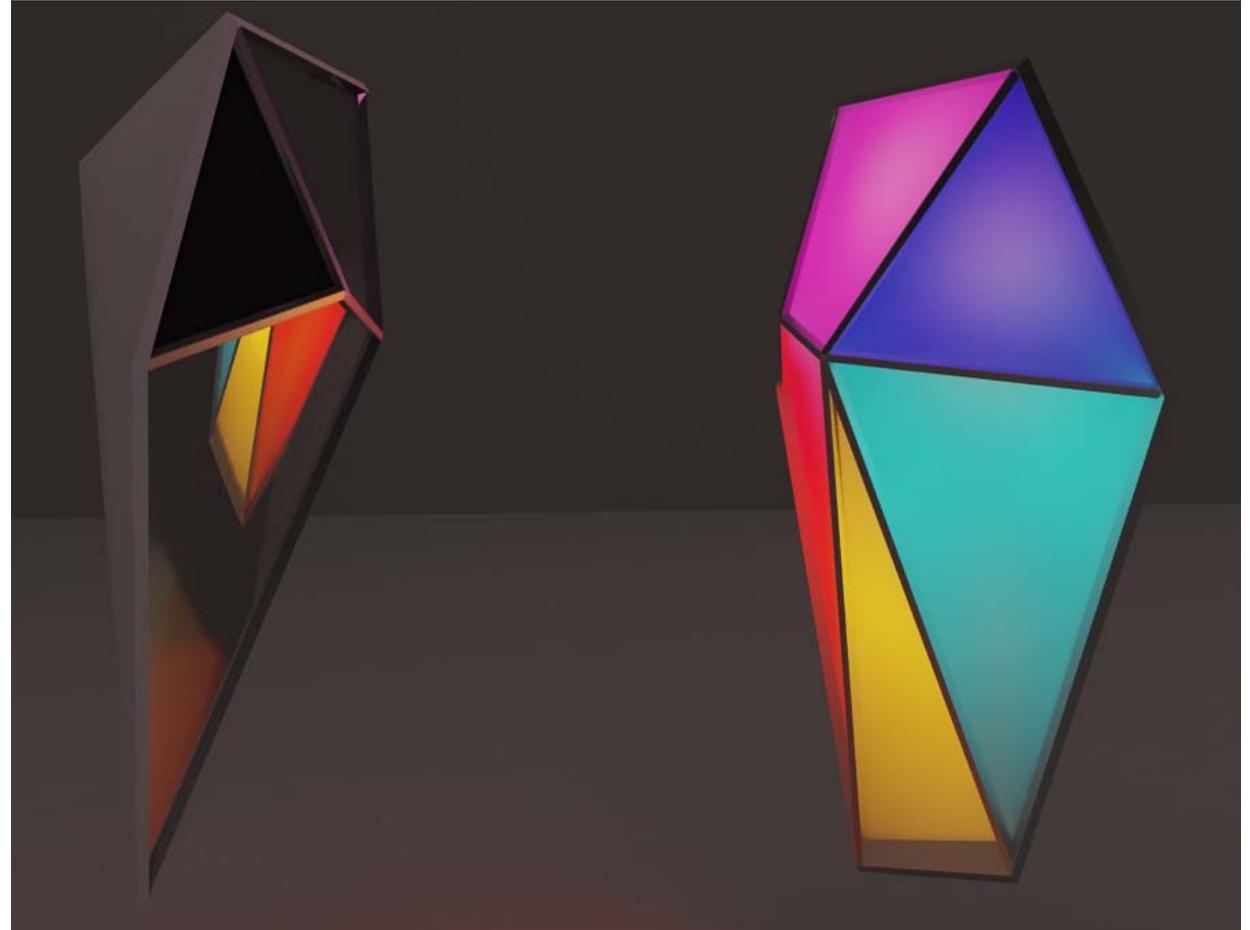
MAINTENANCE SPECIFICATIONS

To be specified by fabricators with approval by Moment Factory and the client.

RENDERS

Renders

PRISM SHAPE



Renders

PRISM SUPPORT STRUCTURE



Support structure shape



Support structure with the tree

Renders

SIDEWALK PERSPECTIVE

