

**From:** [Green, Frank](#)  
**To:** [Daly, Keith](#)  
**cc:** [Degenhart, Mark](#); [Nelson, Todd](#); [Peppers, Nicki](#)  
**Subject:** FW: C8078 CRC Test Piles - (RAMS 3-7) Bubble Curtain  
**Date:** Tuesday, March 01, 2011 8:48:48 AM  
**Attachments:** [Scan001.pdf](#)

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Keith,

All RAMs are approved.

Mark/Todd,

Can you help me with the question that James has? Let me know.

Thank you.

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**From:** Schufreider, James [mailto:JSchufre@wsdot.wa.gov]  
**Sent:** Monday, February 28, 2011 9:44 AM  
**To:** Green, Frank  
**Subject:** RE: C8078 CRC Test Piles - (RAMS 3-7) Bubble Curtain

These look fine.

Curiosity question – did anyone notice how warm the manifold or valves became when the maximum amount of air was flowing thru them? Nobody noticed? Warm to the touch? Steam was formed when the rain landed on the metal parts?

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**From:** Green, Frank [mailto:greenf@columbiarivercrossing.com]  
**Sent:** Thursday, February 24, 2011 8:52 AM  
**To:** Schufreider, James  
**Cc:** Daly, Keith  
**Subject:** FW: C8078 CRC Test Piles - (RAMS 3-7) Bubble Curtain  
**Importance:** High

James,

You previously assisted me with approval of the valves and hoses/fittings but RAM-0003 is for the gauges and RAM-0006 is for the flowmeters. Can you provide me with your thoughts regarding those materials (do they meet the specification)?

Thank you for all your assistance throughout this process.

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**From:** Beaver, Jesse [mailto:BeaverJ@wsdot.wa.gov]  
**Sent:** Wednesday, February 23, 2011 4:53 PM  
**To:** Green, Frank; Beaver, Jesse  
**Subject:** C8078 CRC Test Piles - (RAMS 3-7) Bubble Curtain  
**Importance:** High

Frank,

Please get feedback from your bubble curtain designer on these submissions.

*Jesse L. Beaver, PE*

State Construction Office

360.705.7825

360.791.2855 (cell)

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**From:** Ablson, Maha  
**Sent:** Friday, February 11, 2011 7:22 AM  
**To:** Niemi, Mike  
**Cc:** Molohon, Rob  
**Subject:** 008078 RAMS#3-7 Bubble Curtain  
**Importance:** High

Good morning Mike,  
Submitted for your evaluation.  
Thank you,

*Maha Ablson*

*RAM Engineer*

WSDOT, Materials Lab

*Office: 360.709.5403*

*Fax: 360.709.5588*

*mahaab@wsdot.wa.gov*

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**From:** Peppers, Nicki [mailto:peppersn@columbiarivercrossing.com]  
**Sent:** Thursday, February 03, 2011 1:37 PM  
**To:** Ablson, Maha  
**Cc:** Daly, Keith  
**Subject:** RAMS 3-7

Please find attached RAM-0003, RAM-0004, RAM-0005, RAM-0006, RAM-0007

High Priority.

Thanks,  
Nicki  
360-816-2167

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Washington State  
Department of Transportation

RAM - 0003

Request for Approval of Material

Contract <b>8078</b>	FA Number _____	SR <b>I-5</b>	Date <b>2/3/11</b>
Section <b>I-5 Columbia River Bridge (WA 0.3 to OR MP 308)</b>		County <b>WA AND OR states</b>	
Contractor <b>AMERICAN CONSTRUCTION COMPANY, INC.</b>		Subcontractor _____	

This form shall be completed prior to submittal. If this form is not complete at time of submittal it may be returned for information that was omitted.  
For assistance in completing, see Instructions and Example

For WSDOT Use Only  
RAM # **3**

Bid Item No.	Material or Product/Type	Name and Location of Fabricator, Manufacturer or Pit Number	Specification Reference	PE/QPL Code	Hdqr./QPL Code
<b>2&amp;3</b>	<b>Furnish manifold</b>	<b>Ashcroft, Inc.</b>	<b>SPECIAL PROVISIONS</b>		
	<b>for both CONFINED</b>	<b>250 East Main Street</b>	<b>page 98</b>	<b>7</b>	
	<b>AND UNCONFINED</b>	<b>Stratford, CT 06614</b>			
	<b>BUBBLE CURTAINS</b>				
<b>2.12</b>	<b>PRESSURE GAUGES</b>	<b>www.ashcroft.com</b>			
<b>3.12</b>					

Project Engineer <b>Lucki Peppers for Frank Green</b>	Date <b>2/3/11</b>	State Materials Engineer	Date
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Acceptance Action Codes for use by Project Engineer and State Materials Laboratory

1. Acceptance Criteria: Acceptance based upon 'Satisfactory' Test Report for samples of materials to be incorporated into project.
2. Acceptance Criteria: Mfg. Cert. of Compliance for 'Acceptance' prior to use of material.
3. Acceptance Criteria: Catalog Cuts for 'Acceptance' prior to use of material. Catalog Cut Approved  Yes  No
4. Acceptance Criteria: Submit Shop Drawings for 'Approval' prior to fabrication of material.
5. Acceptance Criteria: Only 'Approved for Shipment', 'WSDOT Inspected' or 'Fabrication Approved Decal' material shall be used.
6. Acceptance Criteria: Submit Certificate of Materials Origin to Project Engineer Office.
7. Acceptance Criteria: Request Transmitted to State Materials Laboratory for Approval Action.
8. Source Approved:
9. Approval Withheld: Submit samples for preliminary evaluation.
10. Approval Withheld:
11. Miscellaneous Acceptance Criteria.

Remarks:

**APPROVED**  
*James Schepfer*  
**2-28-2011**

cc: American Construction, Peppers

Project Engineer Distribution

- Contractor  
 Region Operations Engineer  
 Fabrication Inspection
- Region Materials  
 State Materials Lab  
M/S 47365

State Materials Engineer Distribution

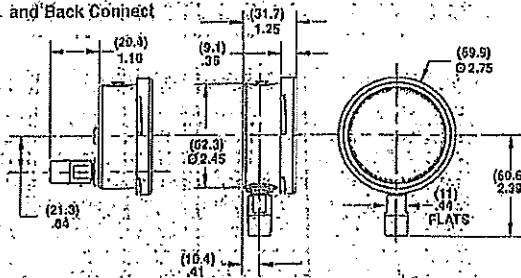
- General File  
 Other \_\_\_\_\_
- Signing Inspection

# Type 1009SW Stainless Case Gauge with Stainless Steel System

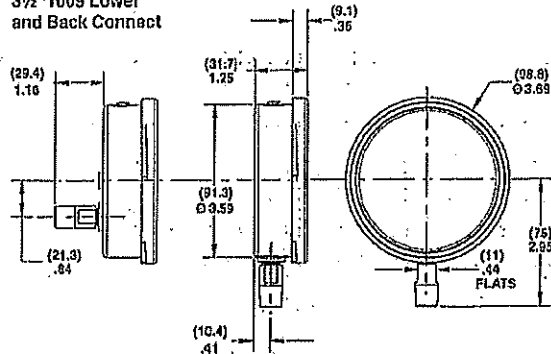


## DIMENSIONS

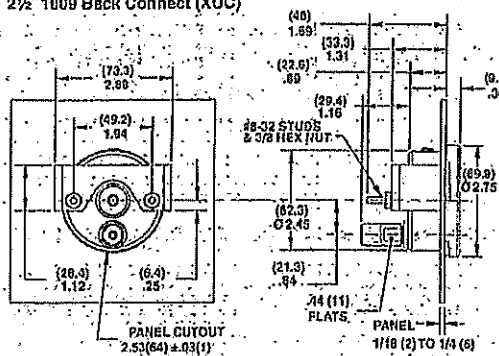
2 1/2" 1009 Lower and Back Connect



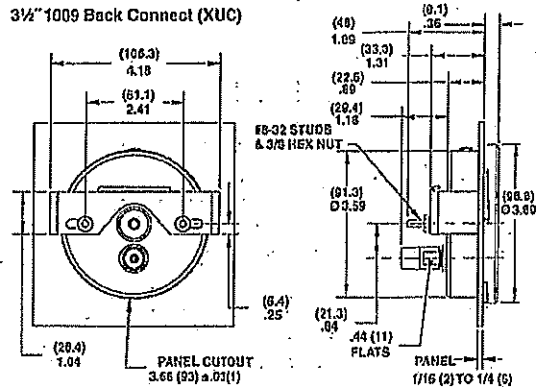
3 1/2" 1009 Lower and Back Connect



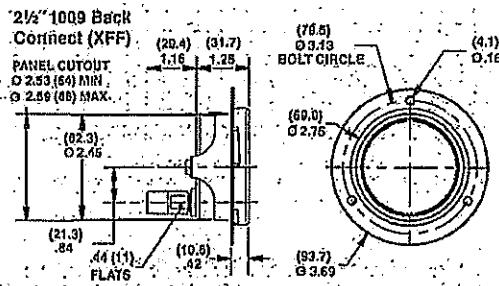
2 1/2" 1009 Back Connect (XUC)



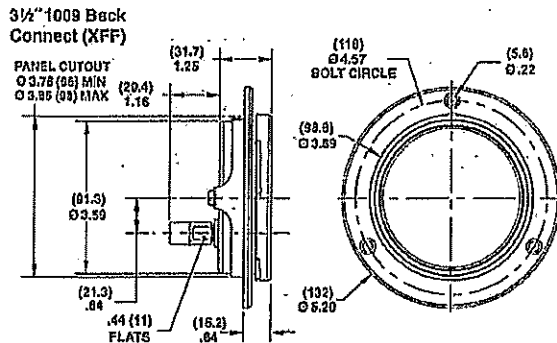
3 1/2" 1009 Back Connect (XUC)



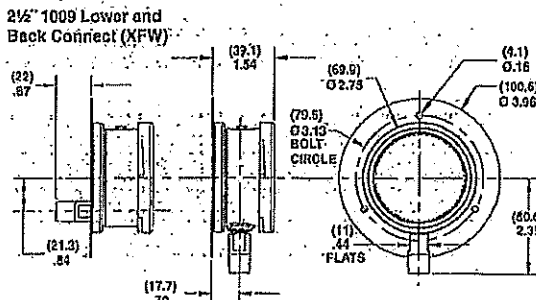
2 1/2" 1009 Back Connect (XFF)



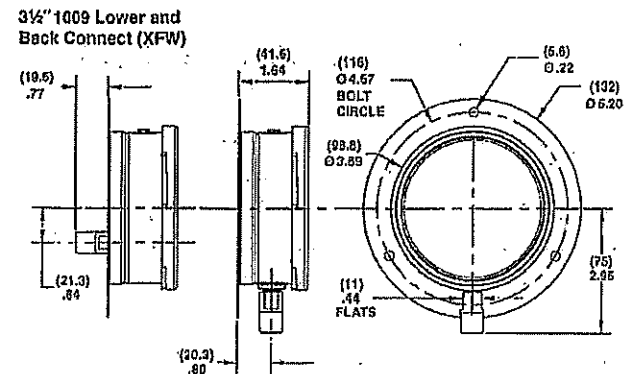
3 1/2" 1009 Back Connect (XFF)



2 1/2" 1009 Lower and Back Connect (XFW)



3 1/2" 1009 Lower and Back Connect (XFW)





Washington State  
Department of Transportation

RAM-0004

Request for Approval of Material

Contract <b>8078</b>	FA Number _____	SR <b>I-5</b>	Date <b>2/3/11</b>
Section <b>I-5 Columbia River Bridge (WA 0.3 to OR MP 308)</b>		County <b>WA AND OR states</b>	
Contractor <b>AMERICAN CONSTRUCTION COMPANY, INC.</b>		Subcontractor _____	

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For WSDOT Use Only  
RAM # **4**

Bid Item No.	Material or Product/Type	Name and Location of Fabricator, Manufacturer or Pfl Number	Specification Reference	PE/QPL Code	Hdqr./QPL Code
<b>2&amp;3</b>	<b>Furnish manifold for both CONFINED AND UNCONFINED BUBBLE CURTAINS</b>	<b>TA-CHEN Industrial 5855 Ispo Avenue Long Beach, CA 90805</b>	<b>SPECIAL PROVISIONS page 98</b>	<b>A 8</b>	
	<b>GATE VALVES</b>				
<b>2.08</b>					
<b>3.08</b>					

Project Engineer <b>Licki Peppers for Frank Green</b>	Date <b>2/3/11</b>	State Materials Engineer	Date
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- Acceptance Criteria: Only 'Approved for Shipment', 'WSDOT Inspected' or 'Fabrication Approved Decal' material shall be used.
- Acceptance Criteria: Submit Certificate of Materials Origin to Project Engineer Office.
- Acceptance Criteria: Request Transmitted to State Materials Laboratory for Approval Action.
- Source Approved:

- Approval Withheld: Submit samples for preliminary evaluation.
- Approval Withheld:

11. Miscellaneous Acceptance Criteria.

Remarks: **Approved per CM Section 9-1.1D**  
**APPROVED** *James Schufreide*  
**cc: American Construction, Peppers** **2-28-2011**

<b>Project Engineer Distribution</b> <input type="checkbox"/> Contractor <input type="checkbox"/> Region Operations Engineer <input type="checkbox"/> Fabrication Inspection	<input type="checkbox"/> Region Materials <input type="checkbox"/> State Materials Lab M/S 47365	<b>State Materials Engineer Distribution</b> <input type="checkbox"/> General File <input type="checkbox"/> Other _____ <input type="checkbox"/> Signing Inspection
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Washington State  
Department of Transportation

RAM - 0005

Request for Approval of Material

Contract <b>8078</b>	FA Number _____	SR <b>I-5</b>	Date <b>2/3/11</b>
Section <b>I-5 Columbia River Bridge (WA 0.3 to OR MP 308)</b>		County <b>WA AND OR states</b>	
Contractor <b>AMERICAN CONSTRUCTION COMPANY, INC.</b>		Subcontractor _____	

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For WSDOT Use Only	
RAM #	<b>5</b>
Bid Item No.	Material or Product/Type
Name and Location of Fabricator, Manufacturer or PII Number	Specification Reference
PE/QPL Code	Hdqtr./QPL Code

Bid Item No.	Material or Product/Type	Name and Location of Fabricator, Manufacturer or PII Number	Specification Reference	PE/QPL Code	Hdqtr./QPL Code
<b>2&amp;3</b>	<b>Furnish manifold</b>	<b>TA-CHEN Industrial</b>	<b>SPECIAL PROVISIONS</b>		
	<b>for both CONFINED</b>	<b>5855 Ispo Avenue</b>	<b>page 98</b>	<b>7</b>	
	<b>AND UNCONFINED</b>	<b>Long Beach, CA 90805</b>			
	<b>BUBBLE CURTAINS</b>				
	<b>BALL VALVES</b>				
<b>2.09</b>					
<b>3.09</b>					

Project Engineer <b>Sticki Peppers for Frank Green</b>	Date <b>2/3/11</b>	State Materials Engineer	Date
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- Acceptance Criteria: Request Transmitted to State Materials Laboratory for Approval Action.
- Source Approved:

- Approval Withheld: Submit samples for preliminary evaluation.
- Approval Withheld:
- Miscellaneous Acceptance Criteria.

Remarks:

**APPROVED** James Schepfer  
2-28-2011

cc: American Construction, Peppers

Project Engineer Distribution

- Contractor  Region Materials  
 Region Operations Engineer  State Materials Lab  
 Fabrication Inspection M/S 47365

State Materials Engineer Distribution

- General File  Signing Inspection  
 Other \_\_\_\_\_