



**B31J Essentials for
CAESAR II 2017 (Version 9.0)**

Released: May 2017

© 2017 Intergraph Corporation. All rights reserved. Intergraph and the Intergraph logo are registered trademarks of Intergraph Corp. or its subsidiaries in the United States and in other countries. Other brands and product names are trademarks of their respective owners.

The content of this document is proprietary work of Intergraph Corporation, or relevant third parties, and is protected by copyright law and international treaty. Any use, duplication, distribution or disclosure of such, other than as specified herein, is unauthorized and in violation of applicable copyright law and international treaty. All rights in content or materials bearing copyright notice or other attribution of third party rights are reserved to the relevant third party. United States Government license rights are limited to those mandatory rights identified in DFARS 252.227-7015(b).

Intergraph may make improvements and/or changes in the products and/or the programs described in this publication at any time without notice.

Any content or materials supplied hereunder are provided "as is," without warranty of any kind, either expressed or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose, or against infringement. In no event shall Intergraph be liable for any damages arising out of, or in connection with the downloading, viewing, use, duplication, distribution or disclosure of any content or material published by Intergraph, including but not limited to any direct, indirect, incidental, special, punitive or consequential damages, or loss or corruption of data.

Some jurisdictions do not allow the exclusions or limitations set forth above, so the above may not apply to you. The exclusions or limitations shall apply in all jurisdictions to the maximum extent allowed by law.

Intergraph Corporation

305 Intergraph Way

Madison, AL 35758

Phone: +1.256.730.2000

Toll Free USA: +1.800.345.4856

Fax: +256.730.2048

B31J Essentials for CAESAR II 2017 (v. 9.0)

What is B31J Essentials?

B31J Essentials provides a set of calculations for revised SIFs and flexibility factors, as defined in the upcoming revision to *ASME B31J, Stress Intensification Factors (i-Factors), Flexibility Factors (k-Factors) and their Determination for Metallic Piping Components*. By using these revised SIFs and flexibilities, your stress analyses produce more accurate results. B31J Essentials provides the “more applicable data” referenced in recent editions of the piping codes.

Note: B31J Essentials is a subset of FEATools. Therefore, if you currently have purchased and installed FEATools (Version 3.0), you do not need to install B31J Essentials.

How can I get B31J Essentials?

If you are current on CAESAR II maintenance and have installed CAESAR II 2017 (v.9.00), you can download the B31J Essentials installer from Intergraph Smart Support. See the Installation Instructions in this document for more information.

Note: For B31J Essentials to run, you must install CAESAR II 2017 Hot Fix 2 over CAESAR II 2017 (v.9.00). Once you download the B31J Essentials installer from Smart Support, run the installer to set up B31J Essentials.

How does CAESAR II 2017 implement B31J Essentials?

B31J Essentials is FEATools (Version 3.0), but limited to only the B31J calculations (for SIFs and Flexibilities). You can access the B31J calculations by selecting the FEA Translation option from the CAESAR II Main Menu. The software starts FEATools, which provides the B31J computations for the translated CAESAR II model.

What is the difference between FEATools and B31J Essentials?

For the B31J computations, there is no difference. The fully-licensed FEATools software also provides a complete FEA analysis of tees, laterals, and bends, as well as support design and local component evaluation.

Note: Because B31J Essentials is a subset of FEATools, if you currently have FEATools (Version 3.0) installed, you do not need B31J Essentials.

Download Instructions for B31J Essentials Installer

1. Logon to the Intergraph Smart Support website at <http://smartsupport.intergraph.com>.
2. Select the **View Downloads** tab.
3. Select **CAESAR II**.
4. Select **Freeware Tools and Utilities**.
5. Select **Support Freeware Utilities**.
6. Select **B31J Essentials**.

The B31J_Essentials.zip file downloads to your machine.

Installation Instructions for B31J Essentials

1. Run the **B31J_Essentials.exe** file.
The PRG Products for ICAS 2017 Essentials Setup dialog displays.
2. Click **Next** on the Welcome page.



3. On the **End-User License Agreement** page, carefully read the license agreement.
4. Click **I accept the terms in the license agreement**, and then click **Next**.
5. On the **Select Installation Folder** page, review the installation folder path. If needed, click **Browse** and select a new folder location. Click **Next**.
6. On the **Ready to Install** page, click **Install** to begin installing the client software.
The Installing PRG Products for ICAS 2017 Essentials dialog displays. As the installation progresses, the status displays in a series of progress bars.
7. On the **Select License Type** page, select your license type: network ESL, local ESL, or SPLM license.
8. Click **Finish** to exit the PRG Products for ICAS 2017 Essentials Setup installer.
9. Double-click the PRG for ICAS 2017 desktop icon or locate and click the version in the Start menu in Windows to open the software.

Contact Intergraph Technical Support at ppmcrm@Intergraph.com if you have any questions about your version or how to apply this hotfix.