# **GENERAL APPLICATION NOTES**

## Storage and Handling:

Trinus recommends that all polyethylene pipe be stored safe from any damage caused by piercing or crushing. Black pipe may be stored outdoors free from weather or ultraviolet exposure. Coloured pipe contains ultraviolet inhibitors to protect the material from sunlight, however it should be stored in a protected area away from exposure to sunlight. Do not expose pipe to excessive heat. Do not drag across rough terrain or sharp objects during transportation or while in service.

### Pressure Ratings of Pipe:

All pressure ratings of Trinus pipes and tubes are manufactured for an operating temperature of 73.4°F They can be used at higher temperatures, taking in consideration the reduced pressure capacity of the pipe with an increase of temperature. Please consult the *Pressure Rating Vs. Temperature Chart* for further information.

#### Installation Suggestions:

All pipe should be inspected prior to installation for damages such as cuts, kinks or gauging that may have occurred during shipping or handling. Do not install pipe that is damaged. The lay where the pipe is to be installed should be uniform and free from any sharp or abrasive objects that could cause damages during handling. Installed pipe must be protected from damage prior to embedment, do not allow any equipment or people to travel over the exposed pipe. Trinus recommends that the entire system be pressure tested with water prior to embedment. Do not pressure test with air.

Do not use a torch to heat polyethylene pipe to assemble fittings. It is not recommended to heat pipe for this purpose beyond 200°F. The preferred method for warming pipe is by immersion in hot water. Trinus advises that pipe be stored in a climate controlled environment prior to cold weather installation to keep pipe as flexible as possible.

#### Pipe Lubrication:

The use of any form of lubricant, detergent, soap or any other surfactant chemicals to improve the insertion of fittings voids any warranty set by Trinus Pipes & Tubes Ltd. These chemicals may cause stress cracking in polyethylene and should be avoided. Trinus Pipes & Tubes Ltd. does not recognize any pipe dope or sealant as being acceptable for use on any polyethylene pipe regardless of manufacturer's claims.

#### Insert Fittings:

Trinus recommends the use of insert fittings with enough length to allow the application of two clamps on each side being joined. Clamps and screws are to be made entirely of Stainless steel. Placement of clamps should be set at an opposite 180° from one another to avoid conflict or damage to the pipe during installation. Clamping should always be done over the barb of the fittings and not at the flat portion.

#### Thermal Fusion of HDPE:

Trinus products may be joined together or to fittings by thermal heat fusion. Be sure to closely follow the guidelines of the tooling manufacturer when joining the pipe or fittings by thermal fusion. When properly made, thermal fusion joints are as strong or stronger than the pipe itself and also eliminate flow restriction. Excessive heat times can overheat the pipe or fitting and cause brittle joints which are unfit to use. Shortening heat times can result in an incomplete bond of material and a weak joint that may fail. Trinus does not recommend the fusion of different grade materials as these joints may cause a failure due to a difference in thermal temperature settings of materials.

#### Alternative Uses:

Before attempting to use polyethylene in applications other than for the transport of water, Trinus recommends consulting with an expert source to determine if the usage is suitable. Certain chemicals may alter the stability of polyethylene and may compromise its ability to withstand pressure. If polyethylene pipe is used for the transportation of chemicals or chemicals are present in the water being transported, it is the responsibility of the user to determine if the chemicals are compatible with polyethylene pipe. Please refer to the Trinus *Chemical Compatibility Chart* for reference.

#### Local Building Codes:

It is the users responsibility to ensure the installation of polyethylene pipe meets local building codes prior to beginning the work.

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