INFORMATION REQUIRED FOR DESIGN VERIFICATION OF PRESSURE PIPING

To issue a Design Verification certificate for pressure piping we require isometric drawings with all the required information below so that we can stamp and reference these on the Certificate. Also, we require any relevant reference information to help support the pressure piping being Design Verified and examples can be found below. Please complete an individual list for every piping system:

Item Required	**Comment Below if Required**
GENERAL INFORMATION TO BE STATED ON ISOMETRIC DRAWINGS	
- Job/Project name	
- Person & Company submitting information	
- Name of the client the DV is for?	
- Geographic location in NZ - to carry out Seismic/Wind Calcs (or supply)	
DESIGN INFORMATION TO BE STATED ON ISOMETRIC DRAWINGS	
- Fully dimensioned piping runs	
- Support types and locations (including anchors)	
- Line Number or description of pipe run	
- Piping Design/Inspection/Testing Code (e.g. ASME B31.1 or B31.3)	
- Design pressures (max/min)	
- Design temperatures (max/min)	
- Test pressure (cold)	
- Contents (e.g. Fluid/Gas type and specific gravity)	
- Hazard Level to AS4343 (stating additional factors e.g. is site a MHF)	
- Pipe Material Specification (e.g. A 106 B, A312 TP304)	
- Pipe sizes and wall thicknesses (e.g. NB and sch)	
- Corrosion Allowance	
- Post Weld Heat Treatment required?	
- NDT Requirements	
- Flange rating, type and material	
- Fitting rating, type and material (e.g. tees, elbows)	
- Valve rating, type, material & dimensions	

INFORMATION REQUIRED FOR DESIGN VERIFICATION OF PRESSURE PIPING

Item Required	Comment Below if Required
REFERENCE INFORMATION (TO HELP SUPPORT THE ABOVE INFORMATION)	
- Connected vessels drawings with nozzle details & allowable nozzle loads	
- Connected piping isometrics back to anchor or lines stop	
- Design Life	
- Average or max elevation of the piping (or if below ground, soil properties)	
- Insulation thickness and density (and/or pipe internal lining)	
- Valve weights	
- Automated Valve Actuator weights	
- In-line instrument rating, dimensions and weights	
- Additional loads (eg discharge from safety valves, slug loads etc)	
- Site Pipe Specifications	
- Piping and Instrumentation Diagrams (P&IDs)	
- Site Plans	
- Pipe Support Drawings	
- Sliding support friction factor if known (steel to steel is normally 0.33)	
- Operating pressure	
- Operating temperature	
- Ambient temperature (i.e.at time when installation is taking place)	
- Class of Construction	
- Photos from site, pre or post work	
- Any other special design considerations (eg extreme temperatures, is the site a Major Hazard Facility (MHF) etc)	

The above required info package applies to every line system to be stressed, further additional info pertaining to specific pipeline conditions may be requested in a later stage.