



**KE KELIT NZ LTD**

# **Building Product Quality Plan**

**Revision: 8**

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## KE KELIT Products

- KELOX Multilayer
- STEELFIX
- COPPERFIX
- VSH XPress GAS
- KELEN

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## KE KELIT INTRODUCTION

### KE KELIT – an international company

KE KELIT Kunststoffwerk GmbH, a medium size company in Linz, Austria, has been involved with the development, production and sales pipe systems, pipe insulation and pre-insulated pipes for more than 50 years. From the outset, it was a private initiative of the Karl Egger family.

Success begins with an idea! Over 100 patents and registered designs are clear evidence of the product development skills at our company.

Quality pipe systems have been manufactured for decades, according to our production techniques, using the latest production machinery and technology. Since 1994, all the working procedures and customer relations have been integrated in an ISO 9001 certified quality assurance system.

Our sales in demanding markets worldwide, through our network of subsidiaries and agencies from Europe to the Middle East and from the Far East to Australia, New Zealand and South America underline our competitiveness.

With over 50 years of experience in the plumbing industry and a wealth of knowledge, we have become a partner that you can trust to meet your needs. We are happy to do so both now and to continue to do so in the future.

The formation of a joint venture between KE KELIT Austria and New Zealand stakeholders in late 2013, sees KE KELIT New Zealand open offices throughout New Zealand in early 2014. This 50/50 partnership now brings KE KELIT's innovative piping solutions to the New Zealand market.

Our promise is more than just a slogan: Innovative Pipe Systems!



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## COMPANY QMS POLICY STATEMENT

**Quality is customer satisfaction.**

**The fundamental principles of our quality policy:**

- Our quality philosophy is not restricted to the quality of the product. It covers all the areas contained in ISO 9001 including management responsibilities, production control, research and development, statistical analysis, customer service and efficient environment-friendly technology.
- Suppliers and customers are integrated into the quality assurance system.
- Establish the cause of problems rather than who is to blame.
- Every employee is responsible for the quality of his own work. Training, further education and recognition ensure a high level of motivation and encourage employees to take responsibility and to continuously assess their own work.
- Customer satisfaction can only be achieved if customer and market requirements are met. Research and development is determined by this principle and does not exist merely for its own sake.
- A responsible attitude towards the environment, both now and in the future, compels us to produce economic products with a long service life, using environment-friendly manufacturing processes.

*"There is hardly anything in this world that somebody cannot do a little bit worse and sell at a lower price. People who are only dictated by price are easy prey for these machinations. It is imprudent to pay too much but it is worse to pay too little. When you pay too little, sometimes you lose everything since the object you have bought cannot fulfil the task it has been set. According to the law of the economy it is not possible to acquire high value with little money. Accept the lowest offer and you take the risk that you may need to incur extra costs. If this is the case then you also have enough money to pay for something better."*

**K.Ruskin, English social reformer 1819-1900**

We can agree upon and specify quality products. Quality can be backed up with test reports and approvals. Real quality is shown above all in significant references. Satisfied customers are the only valid proof of quality.

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## PRODUCT SPECIFICATIONS

### KELOX Multilayer

KELOX Multilayer Pipe System is designed for use in the following applications:

- Domestic and Commercial Hot and Cold Drinking Water systems up to 70°C – 10 bar (Class 2 as per AS4176/ENISO 21003) temperature max 80°C/1 year,
- Radiator System up to temperature max 90°C – 10 bar (Class 5 as per AS4176/EN ISO 21003) according to relevant time/temperature profile given in EN ISO 21003-1 Table 1,
- Industrial applications limited to compressed air, inert gases and technical fluids (always consult with KE KELIT for suitability and written pre-approval).

KELOX pipe is for internal use within the frame and structure of the building. The designer must correctly use the KELOX pipe diameter for its intended purpose and take into account the flow and pressure rate requirements (refer to KELOX Handbook).

Installation can only be carried out by a Registered Certifying Plumber or a Registered Licensed Plumber under the supervision of a Certifying Plumber as set out by the Plumbers Gasfitters and Drainlayers Act 2006. Installers are required to also hold a KE KELIT Installation training card and KE KELIT approved tools must only be used as outlined in the KE KELIT training and KELOX Handbook.

*Table 0-1: KELOX Multilayer Specification*

Applications	Temperature & Pressure	Size	Material	Jointing	Fittings
Chilled Water	-20° to 90°, 10 bar max	16mm - 75mm	PE-RT/Al/PE-RT manufactured to AS4176 (EN/ISO 21003), (KELOX by KE KELIT)	Push & Press manufactured to AS4176 (EN/ISO 21003)	Threaded (EN10226-1), Couplings (ISO 228-1)
Heating Hot Water	-20° to 90°, 10 bar max	16mm - 75mm	PE-RT/Al/PE-RT manufactured to AS4176 (EN/ISO 21003), (KELOX by KE KELIT)	Push & Press manufactured to AS4176 (EN/ISO 21003)	Threaded (EN10226-1), Couplings (ISO 228-1)
Domestic Potable Hot and Cold Water	70° (80° max), Operating Pressure: 10bar max	16mm - 75mm	PE-RT/Al/PE-RT manufactured to AS4176 (EN/ISO 21003), (KELOX by KE KELIT)	Push & Press manufactured to AS4176 (EN/ISO 21003)	Threaded (EN10226-1), Couplings (ISO 228-1)

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## STEELFIX

The STEELFIX Pipe System is designed for use in the following applications:

- Potable Hot and Cold Water (STEELFIX Stainless), temperature max 135°C – 16 bar
- Central Heating System up to temperature max 135°C – 16 bar
- Closed loop Cooling Systems: minimum temp -35°C – 16 bar.
- Closed Loop Solar Installations: -20°C to 200°C. Max pressure 16bar (using FPM-FPM Green O-ring)
- Closed Loop Industrial Applications: -35°C to 135°C. Max pressure 25bar (depending on the application and using KE KELIT approved press tools)
- Compressed Air Applications (consult the STEELFIX Technical Manual for further details).

The designer must correctly use the STEELFIX pipe for its intended purpose and take into account the flow and pressure rate requirements (refer to STEELFIX Technical Manual).

*Table 0-2: STEELFIX Specification*

Applications	Temperature & Pressure	Size	Material	Jointing	Fittings
Potable Hot and Cold Water	-35°C to 135°C, 16 bar max	15mm - 108mm	EN 1.4401/AISI 316 manufactured to EN10312 Tested to AS/NZS 4020. (steelFIX Stainless by KE KELIT)	EN 1.4401/AISI 316 press fittings with EPDM (black) O-rings, tested to AS/NZS 4020	Threaded (EN10226-1), Couplings (ISO 228-1)
Potable Hot and Cold Water	-35°C to 135°C, 16 bar max	15mm - 108mm	EN 1.4521/AISI 444 manufactured to EN10312 Tested to AS/NZS 4020 (steelFIX Stainless by KE KELIT)	EN 1.4401/AISI 316 press fittings with EPDM (black) O-rings, tested to AS/NZS 4020	Threaded (EN10226-1), Couplings (ISO 228-1)
Closed Circuit Heating Hot Water	-35°C to 135°C, 16 bar max	15mm - 108mm	ULC Carbon Steel, E190 mat. No. 1.0034 as per EN 10305-3. Zinc coating of 8-15µm (C-Steel from KE KELIT)	ULC Carbon Steel press fitting with EPDM (black) O-rings	Threaded (EN10226-1), Couplings (ISO 228-1)
Industrial Applications	-35°C to 135°C, 25 bar max , Vacuum applications to relative -0.85	15mm - 108mm	EN 1.4521/AISI 444 manufactured to EN10312 Tested to AS/NZS 4020 (steelFIX Stainless by KE KELIT)	EN 1.4401/AISI 316 press fittings with EPDM (black) O-rings, tested to AS/NZS 4020	Threaded (EN10226-1), Couplings (ISO 228-1)

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## COPPERFIX

COPPERFIX Pipe System is designed for use in the following applications:

- Potable Hot and Cold Water, temperature max 130°C – 16 bar
- Central Heating System up to temperature max 130°C – 16 bar
- Closed loop Cooling Systems: minimum temp -20°C – 16 bar.
- Closed Loop Solar Installations: -20°C to 230°C. Max pressure 10bar (using Viton-FPM Green O-ring)
- Compressed Air Applications (consult the COPPERFIX Technical Manual for further details).

The designer must correctly use the COPPERFIX pipe for its intended purpose.

*Table 0-3: COPPERFIX Specification*

Applications	Temperature & Pressure	Size	Material	Jointing	Fittings
Potable Hot and Cold Water	-35° to 110°, Max temp 130°C, 16 bar max	15mm - 108mm	Copper pipes manufactured in accordance with EN1057. Tested to AS/NZS 4020. (COPPERFIX by KE KELIT)	EN 1254/7 press fittings with EPDM (black) O-rings, tested to AS/NZS 4020	Threaded (EN10226-1), Couplings (ISO 228-1)
Closed Circuit Heating Hot Water	-35° to 110°, 16 bar max	15mm - 108mm	Copper pipes manufactured in accordance with EN1057. Tested to AS/NZS 4020. (COPPERFIX by KE KELIT)	EN 1254/7 press fittings with EPDM (black) O-rings, tested to AS/NZS 4020	Threaded (EN10226-1), Couplings (ISO 228-1)
Industrial Applications	-35° to 135°, 25 bar max , Vacuum applications to relative - 0.85	15mm - 108mm	Copper pipes manufactured in accordance with EN1057. Tested to AS/NZS 4020. (COPPERFIX by KE KELIT)	EN 1254/7 press fittings with EPDM (black) O-rings, tested to AS/NZS 4020	Threaded (EN10226-1), Couplings (ISO 228-1)

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## VSH XPress GAS (Supplied by VSH – distributed by KE KELIT NZ)

The VSH XPress GAS product range, distributed by KE KELIT NZ is made up of two systems: Stainless steel press fittings and pipe, and copper press fittings and pipe that are purpose built for gas applications. VSH XPress GAS fittings incorporate an “M” profile.

VSH XPress GAS products are manufactured using unique, modern machinery. The completely automated factory guarantees you safe, high-quality products. All VSH XPress GAS products have a batch identification to track the origin of the raw material and supplier. Mill certificates are available upon request.

VSH XPress GAS is suitable for applications at -20°C to 70°C.

- Sizes 15mm – 108mm for stainless steel gas fittings
- KE KELIT STEELFIX stainless steel 316 piping is available
- Sizes 15mm – 54mm for copper gas fittings
- KE KELIT COPPERFIX hard and half-hard copper piping is available
- Suitable for Natural Gas and LPG applications

Installations are a minimum of 3x faster than traditional systems, as no threading or welding is required.

*Table 0-4 VSH XPress GAS Specification*

System	Applications	Temperature & Pressure	Sizes	Pipe	Jointing	Fittings
VSH XPress Stainless Steel GAS distributed by KE KELIT NZ	Gas Installations Inside Buildings and Outside Buildings (Above Ground)	-20°C to 70°C, 5 bar max	15mm - 108mm	EN 1.4401/AISI 316 manufactured to EN10312	EN 1.4401 / AISI 316 M- profile press fittings with HNBR (yellow) O-rings.	Threaded (DIN 2999/ ISO 7/1)
VSH XPress Copper GAS distributed by KE KELIT NZ	Gas Installations Inside Buildings and Outside Buildings (Above Ground)	-20°C to 70°C, 5 bar max	15mm - 54mm	DHP Copper material no. CW 024A in accordance with DIN EN 1412 complying with EN1057 R250/R290	CU-DHP copper, CW024A materials and 2.109 bronze M-profile press fittings with NBR (yellow) O-rings.	Threaded (DIN 2999/ ISO 7/1), Screwed (DIN 3436 HTC)

All pipework and fittings have been tested to DVGW, ÖVGW, and BSI standards.

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### Areas of use:

VSH XPress Stainless Steel GAS fittings with stainless steel pipes that satisfy DVGW worksheet VP614, SVGW Data sheet G1/01 and ÖVGW PG 314.

<b>O-rings:</b>	<b>HNBR* (yellow)</b>
<b>Operating temperature:</b>	<b>-20°C to +70°C</b>
<b>Operating pressure:</b>	<b>Max. 5 bar inside and outside</b>
<b>Application:</b>	<b>Inside (HTC**, proven tightness of the connection at 650°C for 30 min) or outside buildings. During construction and in concrete, above and under screed within buildings, corrosion protection is recommended (see Section 2.9). Outside of buildings, only lay above ground. Local regulations must always be observed.</b>

\* Hydrogenated Nitrile Butadiene Rubber

\*\* Higher Thermal Capacity

VSH XPress Copper GAS fittings with copper pipes that satisfy EN1057 R250/R290.

<b>O-rings:</b>	<b>NBR*** (yellow)</b>
<b>Operating temperature:</b>	<b>-20°C to +70°C</b>
<b>Operating pressure:</b>	<b>Max. 5 bar inside and outside</b>
<b>Application:</b>	<b>Inside (HTC, proven tightness of the connection at 650°C for 30 min) or outside buildings. During construction and in concrete, corrosion protection is required (see Section 2.9). Not for installation below ground, unless in protective ducting. Outside of buildings, only lay above ground. Local regulations must always be observed.</b>

\*\*\*Nitrile Butadiene Rubber

### Important:

**R220 is NOT approved for gas.**

XPress Copper GAS is a press fitting system made from CU-DHP copper, CW024A materials and 2.109 bronze materials. It is for use with copper Pipes that satisfy EN1057 R250/R290 and fitting sizes range from diameter 15-54 mm. They are fitted with yellow NBR O-rings.

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The VSH XPress GAS system distributed by KE KELIT NZ is for use in 2nd and 3rd family gas installation pipework. These are combustible gases: natural gases and liquid gases. It can be used for gas applications inside buildings (with Higher Thermal Capacity, proven connection tightness over 30 minutes at 650°C) and outside buildings (without HTC). When used outside of buildings it can only be laid above the ground (not under screed or underground). During construction and in concrete, corrosion protection is required for VSH XPress Stainless Steel GAS systems and recommended for VSH Xpress Copper GAS systems. It is advisable to always use corrosion protection on the piping in situations where corrosion is likely to occur (damp room, crawl spaces, etc.). Gas pipes must always be protected in accordance with local regulations.

The operating temperature range of VSH XPress GAS systems is between -20°C and 70°C. The maximum operating pressure allowed within VSH XPress GAS systems is 5 bar, and the maximum allowable test pressure is 7.5 bar. For safety reasons, the maximum test pressure with air or inert gases is set at 3 bar.

## Print & Identification

XPress Stainless Steel GAS fittings are marked as follows:

Yellow marking, GAS, GT5/PN5, 316L, XPress, Dimension, DVGW

XPress Stainless Steel GAS fittings have the following packaging labels:

Type R.....G, Dimension, Description, EAN No., Art. No., Approvals, Quantity

KE KELIT COPPERFIX Pipe is marked as follows:

TX88 BS EN 1057 [Hardness H/HH] [Dimensions: 18x0.8] [TYPE X] [Production date]

XPress Copper GAS fittings are marked as follows:

Yellow marking, GAS, GT1/PN5, RYW, Dimension, DVGW, Gastec Qa

XPress Copper GAS fittings have the following packaging labels:

Type G....., Dimension, Description, EAN no., Art. no., Approvals, Quantity

**For pressure loss data, thermal expansion and flow rate considerations please refer to the latest VSH XPress GAS Technical Handbook**

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## KELEN

KELEN Drinking Water Pipe System is designed for use in Hot and Cold drinking water installation for new or renovation projects, Mechanical and Service applications provided the operating conditions are within the range of (PN10, PN16 and PN20) performance pipe system choices;

### 50 year service live:

- KE02 KELEN pipe PN10 Temp/Pressure range of -5°C to 20°C / 10 bar; 30°C / 9 bar; 40°C / 8 bar
- KE02 KELEN pipe PN16 Temp/Pressure range of -5°C to 20°C / 16 bar; 40°C / 12 bar; 60°C / 8 bar
- KE02 KELEN pipe PN20 Temp/Pressure range of -5°C to 20°C / 20 bar; 40°C / 15 bar; 60°C / 10 bar; 70°C / 8 bar

### 25 year service live:

- KE02 KELEN pipe PN16 Temp/Pressure range of 70°C / 6 bar
- KE02 KELEN pipe PN20 Temp/Pressure range of 80°C / 6 bar

KELEN pipe is for internal use within the frame and structure of the building and underground pipe service to building projects. The designer must correctly use the KELEN pipe diameter for its intended purpose and take into account the temperature, pressure and flow rate requirements (refer to KELEN Handbook).

### KELEN Pipe System can use the following prescribed water supply sources:

- Municipal Water supply; and
- Project site contained Rain Water supply; and
- Project site contained Bore Water supply.

KELEN Pipe systems shall have isolation devices which permit the installation or individual items of apparatus to be isolated from the supply system, for maintenance, testing, fault detection and repair.

For specific design of operating temperature, pressure or flow rates outside of the Scope of Use and Limitations of this Technical Manual, please refer directly to KE KELIT NZ Limited for suitability and written pre-approval.

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*Table 0-5: KELEN Specification*

Applications	Temperature & Pressure	Size	Material	Joining	Fittings
Domestic Potable Cold Water	PN10: 20° / 10 bar. 40° max / 8 bar	20mm - 160mm	PP-R Manufactured to EN ISO 15874, PN10 Pipe system. (KELEN by KE KELIT)	Polyfusion welding, butt welding, electrofusion welding and flange connections	Threaded (EN10226-1), Couplings (ISO 228-1)
Domestic Potable Hot & Cold Water	PN16: 20° / 16 bar. 60° max / 8 bar	20mm - 110mm	PP-R Manufactured to EN ISO 15874, PN16 Pipe system. (KELEN by KE KELIT)	Polyfusion welding, butt welding, electrofusion welding and flange connections	Threaded (EN10226-1), Couplings (ISO 228-1)
Domestic Potable Hot & Cold Water	PN20: 20° / 20 bar. 70° max / 8 bar	20mm - 110mm	PP-R Manufactured to EN ISO 15874, PN20 Pipe system. (KELEN by KE KELIT)	Polyfusion welding, butt welding, electrofusion welding and flange connections	Threaded (EN10226-1), Couplings (ISO 228-1)
Mechanical Services Application	PN10: 20° / 10 bar. 40° max / 8 bar	20mm - 160mm	PP-R Manufactured to EN ISO 15874, PN10 Pipe system. (KELEN by KE KELIT)	Polyfusion welding, butt welding, electrofusion welding and flange connections	Threaded (EN10226-1), Couplings (ISO 228-1)
Mechanical Services Application	PN16: 20° / 16 bar. 60° max / 8 bar	20mm - 110mm	PP-R Manufactured to EN ISO 15874, PN16 Pipe system. (KELEN by KE KELIT)	Polyfusion welding, butt welding, electrofusion welding and flange connections	Threaded (EN10226-1), Couplings (ISO 228-1)
Mechanical Services Application	PN20: 20° / 20 bar. 70° max / 8 bar	20mm - 110mm	PP-R Manufactured to EN ISO 15874, PN20 Pipe system. (KELEN by KE KELIT)	Polyfusion welding, butt welding, electrofusion welding and flange connections	Threaded (EN10226-1), Couplings (ISO 228-1)

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## QUALITY CONTROL: RISK MANAGEMENT & MONITORING

### Identifying Key Risks

Key risks in the supply and installation of a product range are highlighted using a Product Risk Matrix (FMEA Analysis).

The key risks associated with the supply and installation has been defined according to the following categories:

- Risks associated with ordering and shipping from Supplier
- Risks associated with ordering, dispatch and distribution within New Zealand
- Risks associated with the installation of the product or system

A Product Risk Matrix (FMEA) Analysis for each product range highlights the key risks and corrective actions which should be taken to minimise this risk.

An ongoing review process for monitoring these risks is included in **APPENDIX I: Quality Management & Identifying Key Risks** along with records of periodic reviews.

### Monitoring Incidents/Complaints and Resolution

Any incident or complaint is logged in the KE KELIT – Incident Log. The company procedure for logging these complaints and the actions taken are outlined in the company KE KELIT - SOP – Complaints & Product Incident Reporting.

SOP, incident log and records attached in **APPENDIX II: Incident/Complaints Log**.

### Eliminating Risks

#### Risks: Supply Chain

The Product Risk Matrices identify risks in the supply chain associated with the ordering, supply and distribution of the product between the manufacturer and customer. Issues associated with the incorrect supply of products can be minimised by ensuring that the packaging is clear.

**The minimum requirements for packaging as described by KE KELIT NZ is as follows:**

Packaging to be such that pipe and fittings are not damaged and handled as outlined in the relevant product Technical Manual.

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**Labelling on pipe to clearly show the following information:**

- Name of manufacturer and trade mark
- Standard which the pipe is manufactured to
- Outside diameter and nominal wall thickness
- Composition of the pipe
- Design Pressure and temperature
- Information relating to manufacture, batch number, serial number

**Similarly, packaging on fittings shall allow it to be clearly identifiable and shall include the following:**

- Name of manufacturer and trade mark
- Product Name
- Product Description
- Product Code
- Information relating to manufacture, serial number and date of manufacture

An example of the standard KE KELIT Packaging information is shown below in Figure 0-1: Example Labelling.



*Figure 0-1: Example Labelling*

KE KELIT NZ are monitoring and adjusting our processes for making orders and dispatching products to our customers in an effort to minimise these risks.

The KE KELIT NZ Standard Operating Procedures for making orders from our suppliers and processing and tracking orders to our customers is outlined in APPENDIX III: Company SOP's.

Figure 0-2 outlines the process of ordering stock from our suppliers and dispatch of these products throughout New Zealand.

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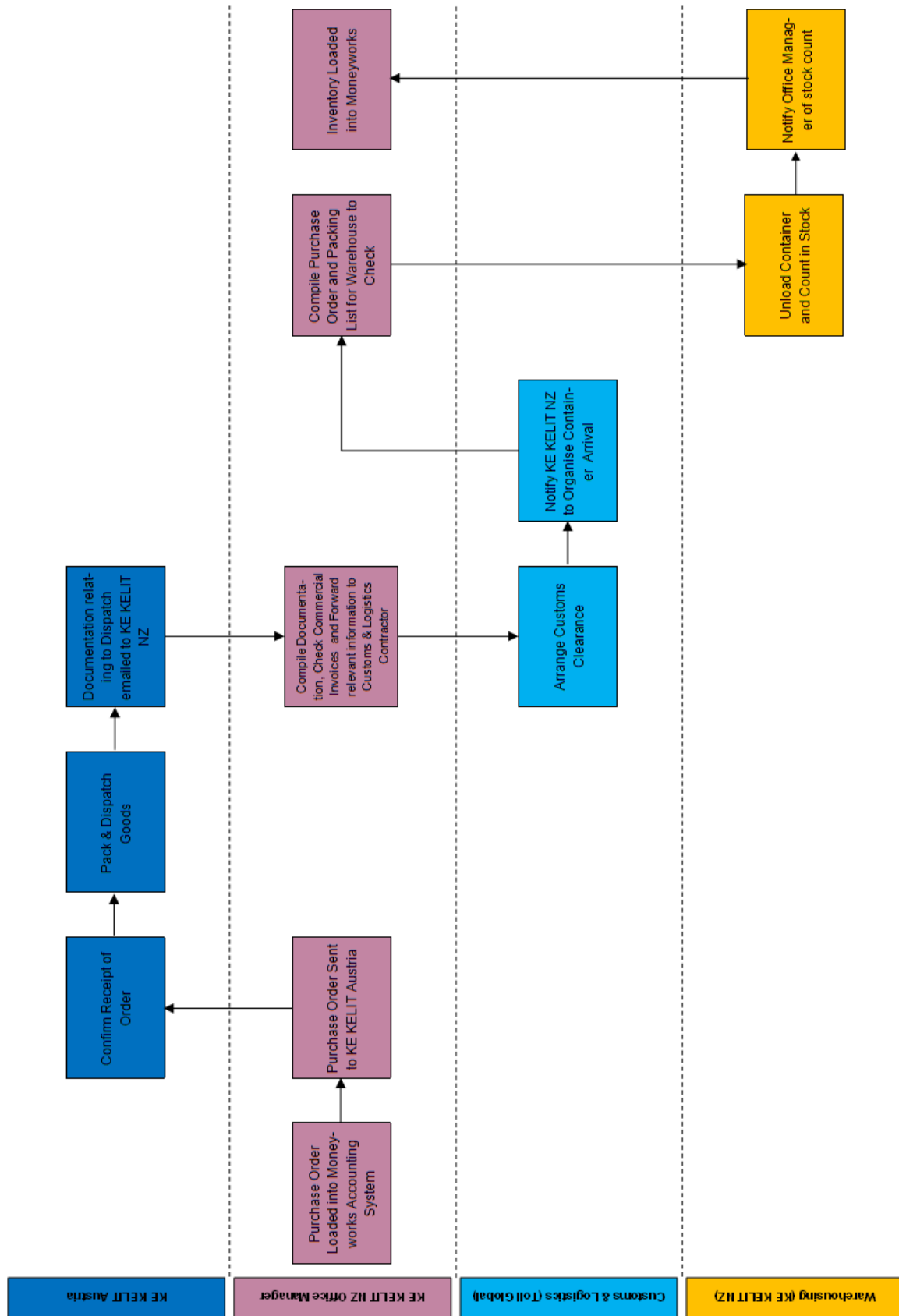


Figure 0-2: Supply Chain Diagram

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### Risks: Product Installation

Corrective action which may be required following the identification of a key risk may include updating of customer training documents.

The SOP for 'Commercial Site Inspections' in APPENDIX III outlines the steps required by the project managers to ensure each floor of a commercial project is properly inspected and documented for any future reference.

Please refer to APPENDIX IV: Training Material for the most recent training material for the Product ranges.

APPENDIX IV: Training Material also contains copies of the KE KELIT NZ Approved Trainers Log and the current list of Approved Operators. Please also refer to the Company SOP on issuing Trained Operator Cards for the KE KELIT Systems.

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## APPENDIX I: Quality Management & Identifying Key Risks

### Records of FEMA Review

Document Type	Document Location	Rev	Compiled	Approved	Revision Date
BPQP	K:\QualityManagement\Building Product Quality Plan	8	FP	AL	24/05/18

Document Type	Document Location	Rev	Compiled	Approved	Revision Date
BPQP	K:\QualityManagement\Building Product Quality Plan	8	FP	AL	24/05/18

## APPENDIX II: Incident/Complaints Log

### SOP – Complaints and Product Incident Reporting

#### Incident Log

Document Type	Document Location	Rev	Compiled	Approved	Revision Date
BPQP	K:\QualityManagement\Building Product Quality Plan	8	FP	AL	24/05/18

Document Type	Document Location	Rev	Compiled	Approved	Revision Date
BPQP	K:\QualityManagement\Building Product Quality Plan	8	FP	AL	24/05/18

## APPENDIX III: Company SOP's

### Issuing Warranty Certificates

### No Charge Items (100% Discount)

### Quotes

### Sales Orders

### Ordering Stock from Suppliers For Specific Projects

### Ordering Stock from KE KELIT Austria

### Hire Tools

### Commercial Site Inspection

Document Type	Document Location	Rev	Compiled	Approved	Revision Date
BPQP	K:\QualityManagement\Buiding Product Quality Plan	8	FP	AL	24/05/18



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## APPENDIX IV: Training Material

### SOP – Operator Training

#### KELOX Multilayer Training Manual (Rev 6)

#### STEELFIX/COPPERFIX Training Manual (Rev 14)

#### KE KELIT - VSH XPress GAS - Training Manual (Rev 1)

#### KELOX Multilayer Technical Handbook (2015)

#### STEELFIX Technical Handbook (05/2016)

#### COPPERFIX Technical Handbook (10/2016)

#### VSH XPress GAS Technical Handbook (Revision 1.3)

#### Trained Operator Log

#### Approved Trainers

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## **APPENDIX V: Warranty Documents, Certificates & Test Reports**

**ISO9001 Certificate (KE KELIT)**

**ISO10005 Certificate (KE KELIT)**

**ISO14001 Certificate (KE KELIT)**

**ISO50001 Certificate (KE KELIT)**

**ISO9001 Certificate (VSH)**

**ISO14001 Certificate (VSH)**

**Warranty Terms – KELOX Multilayer**

**Warranty Terms – STEELFIX**

**Warranty Terms – COPPERFIX**

**Warranty Terms – KELEN**

**Warranty Terms – VSH XPress GAS**

**CodeMark Certificate – KELOX Multilayer (BCS1441)**

**CodeMark Certificate – STEELFIX (BCS1443)**

**CodeMark Certificate – COPPERFIX (BCS1706)**

**CodeMark Certificate - KELEN**

**WaterMark – KELOX Multilayer (WM-022381)**

**Testing to AS/NZS4020 - KELOX**

**Testing to AS/NZS4020 – STEELFIX**

**Testing to AS/NZS4020 – COPPERFIX**

**Testing to AS/NZS4020 - KELEN**

**Testing to ISO 21003 – KELOX**

**Testing to ISO 15874 – KELEN**

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## **COPPERFIX Mill Certificates**

**Australasian Technical Specification – KELOX Multilayer (Rev 13)**

**Australasian Technical Specification – STEELFIX (Rev 6)**

**Australasian Technical Specification – COPPERFIX (Rev 4)**

**Australasian Technical Specification – VSH XPress GAS (Rev 1)**

**DVGW – KELOX Certificate**

**DVGW – STEELFIX Certificate**

**DVGW – STEELFIX Test Reports**

**DVGW – COPPERFIX Certificate**

**DVGW – COPPERFIX Test Reports**

**Kitemark – COPPERFIX License**

**Kitemark – COPPERFIX Test Reports**

**W2 – COPPERFIX Compliance**

**FLOW Consulting Compliance Report – VSH XPress GAS**

**KE KELIT Product Selector**

**BECA – COPPERFIX Compliance Report**

**KE KELIT – Inspection Report**

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