NEW ENERGY EFFICIENT AND COST EFFECTIVE HOUSE CONNECTIONS SUCCESSFULLY TESTED BY MAJOR DUTCH ENERGY SUPPLIERS.

Christian Engel

Thermaflex International Holding

thermaflex

FLEXALEN

Worldwide activities
in Heating, Cooling and Sanitary applications

5 Factories

THERMASMART
Technical Insulation

FLEXALEN
Pre-insulated networks

First FLEXALEN installation

In 1981 the first FLEXALEN pipes were installed into a district heating network of STEWEAG, Austria.

These pipes are still in operation.

thermaflex

FLEXALEN

Application FLEXALEN pre-insulated pipes

District Heating

Domestic Water

District Cooling

thermaflex

FLEXALEN

What are typical problems you are facing with DHC networks?

thermaflex

FLEXALEN

Corrosion

thermaflex

FLEXALEN

Problems from Weather & Installation conditions

thermaflex

FLEXALEN

Problems from tight installation situations

thermaflex

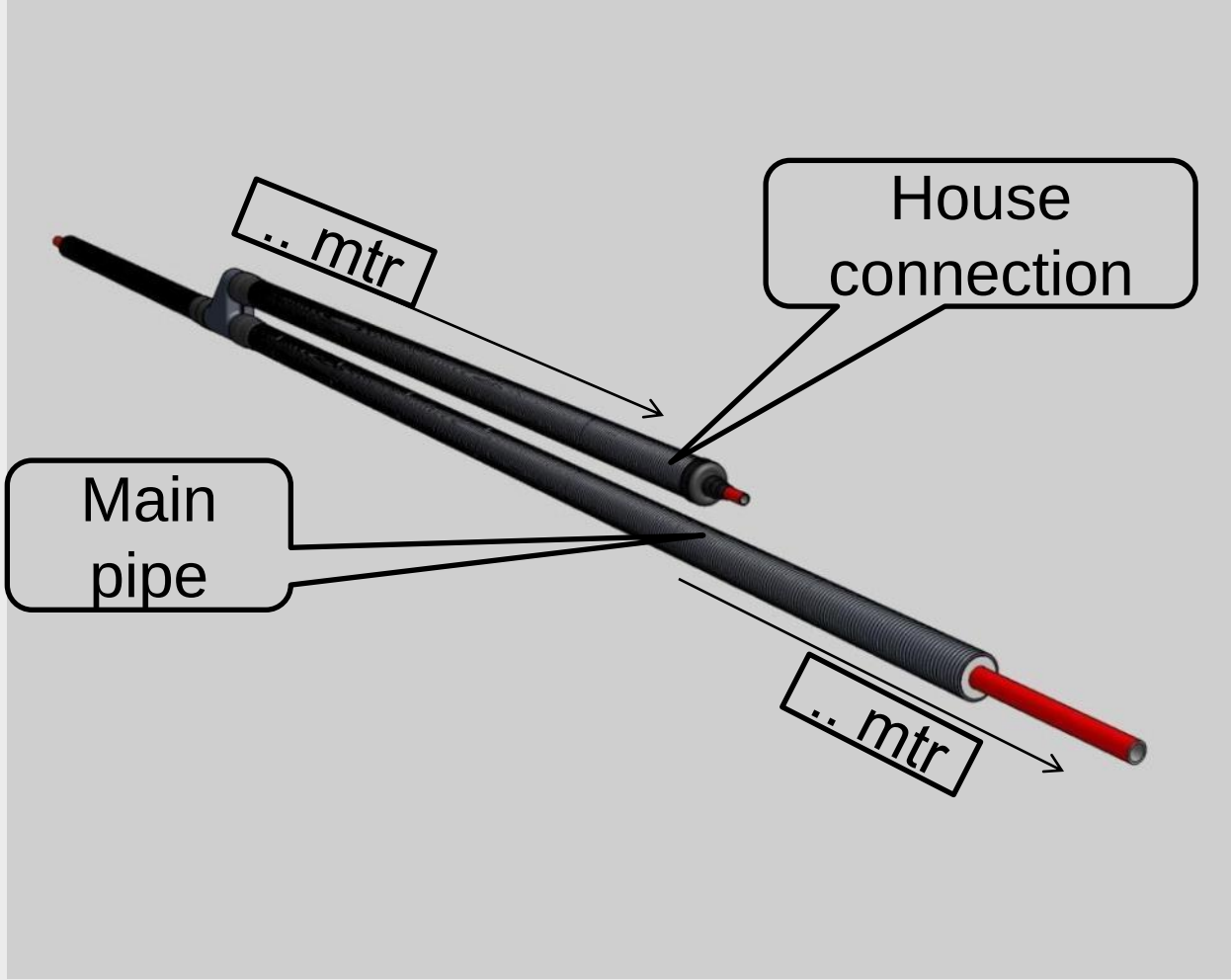
FLEXALEN

What are possible new Solutions for DHC networks?

thermaflex

FLEXALEN

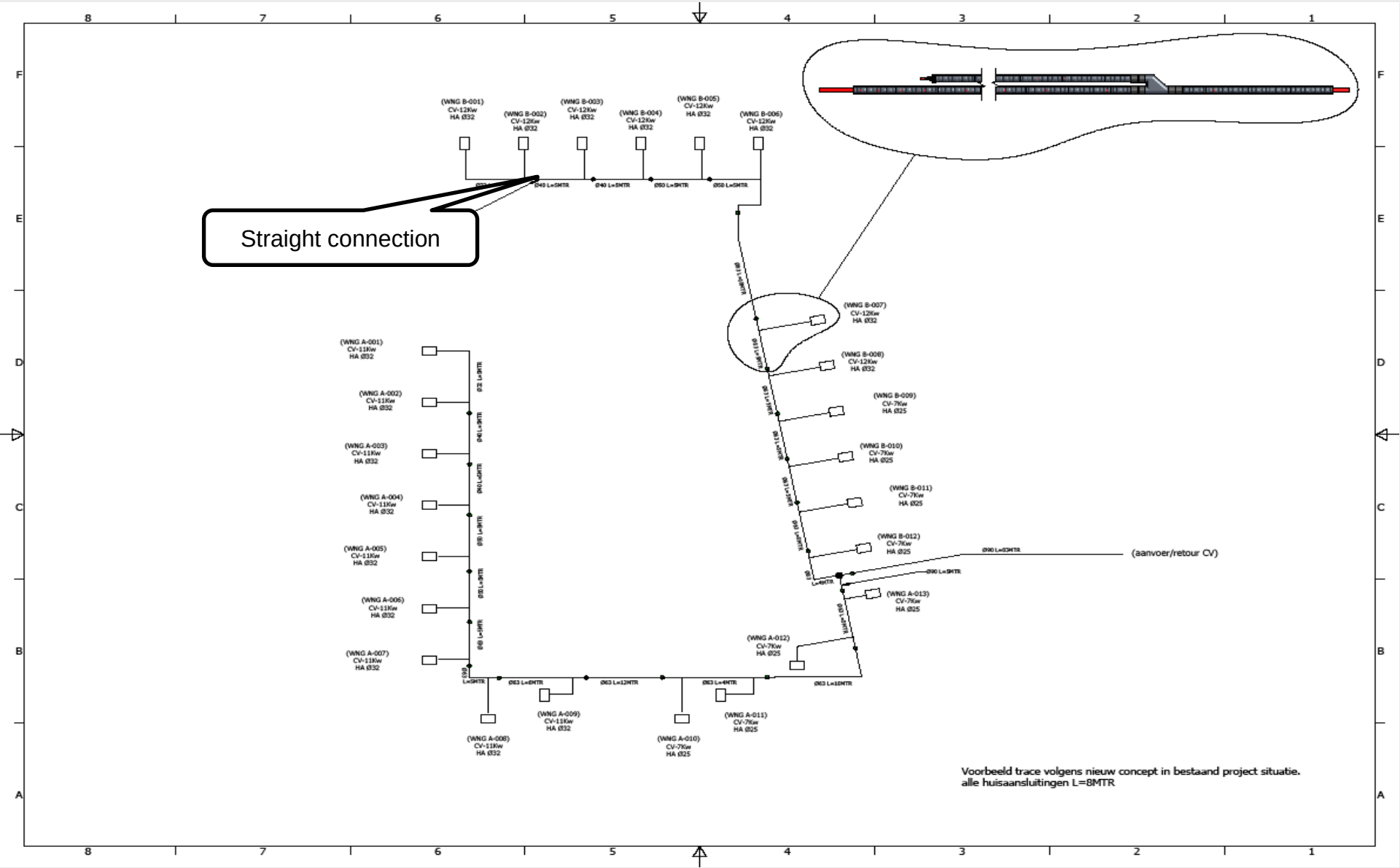
FlexaLink the flexible house connection



thermaflex

FLEXALEN

FlexaLink in a typical project



FlexaLink Reference Projects

- Eneco Heating
  - Wijk Schollevaar, Capelle a/d/ IJssel
  - Ca. 300 houses with Installer Niessink
  - 2010-2011 ca. 1.500 houses

- District Heating Purmerend
  - Wijk Walakker
  - 16 houses with contractor A.Hak
  - 2010 ca. 400 houses tot. ca. 4.000

thermaflex

FLEXALEN

thermaflex

FLEXALEN

FlexaLink – the preferred house connection

Hot water system cost per house	Installed house per day - Hot Water	Total cost per house	"Energy label" system		Lifetime Realised / expected
Traditional Flexalen incl. circulation line	3 á 4 houses	€ 646,59	B		Expected: 50 years
Prefab Tees Flexalen incl. circulation line	2 houses	€ 1.108,39	A		Expected 50 years Not installed
Flexalen FlexaLink incl. circulation line	8 á 9 houses	€ 831,49	A+		Expected: 50 years
Copper system incl. circulation line	2 houses	€ 901,70	C	*	Realised: minimal: 6 years max: 15-20 years
Steel system incl. circulation line	2 houses	€ 869,54	C	*	Realised: minimal: 10 years max: 25-35 years

Installation time per day per pe (5 man)
Labour cost per hour á € 35,-
Material cost nett per house is the average of 10 houses

thermaflex

FLEXALEN

Conclusions Flexalen FlexaLink:

- 30% reduction of the installed cost
- 60-70% less connections on site
- 4-5 times faster installation

- Confirmed by practical experiences in NL

thermaflex

FLEXALEN

From pre-fabricated branches to pre-fabricated networks is the next step

thermaflex

FLEXALEN

Thank you for your attention!

Time for questions...

thermaflex

FLEXALEN