
WADIT
The Proven Sheet Pile Interlock Sealant

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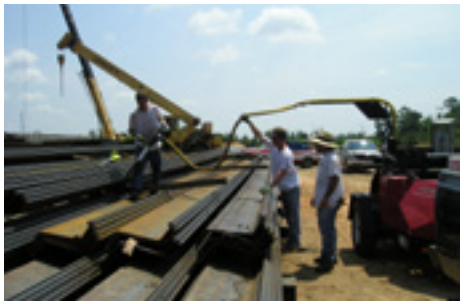










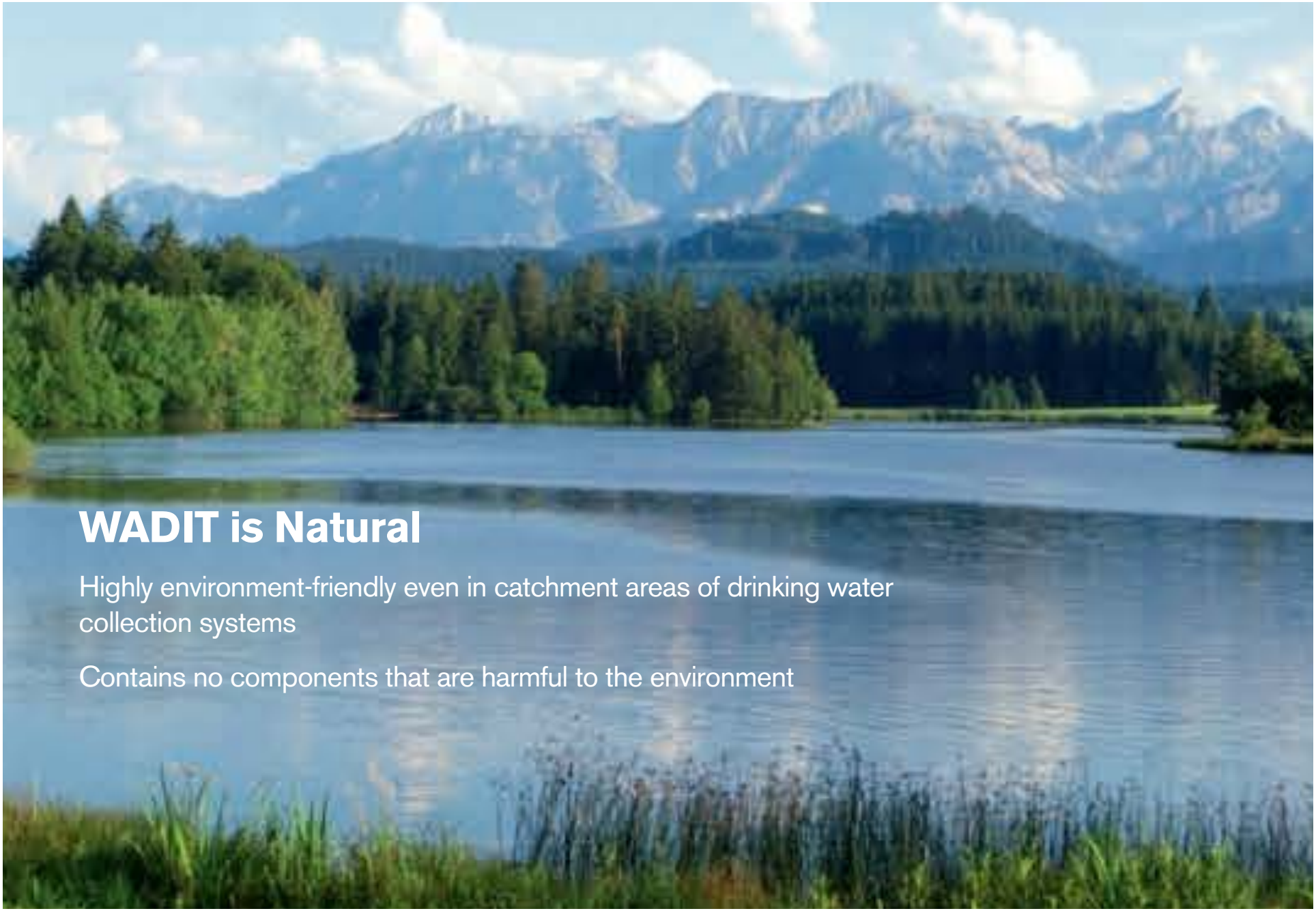



WADIT = Watertight

WADIT® is a steel sheet pile interlock sealant based on sustainable natural raw materials which provides a reliable water seal for sheet pile walls.

Its load capacity is huge, but WADIT® still has extremely green credentials. It is a sealant which can be applied when hot and has been used successfully throughout the world for more than 10 years.

WADIT® has proved to be stable and produces outstanding results even in extreme climatic conditions such as in the tropics or the Arctic



WADIT is Natural

Highly environment-friendly even in catchment areas of drinking water collection systems

Contains no components that are harmful to the environment

Flexibility

Conventional materials start to become brittle as temperatures fall to 50°F or less - work in ground water (40 - 46°F) can be a problem

WADIT® remains perfectly flexible even below 20°F

it does not become brittle

WADIT - Works in extreme heat

Safe and effective at water pressure levels up to 5 bar or 130 ft

Stable and non-deforming in temperatures of up to 125°F

WADIT® can be used for high pressure sealing requirements with long pile lengths and extreme temperature ranges

Less Friction

WADIT® creates a film of lubricant in the interlocks

as it is inserted reducing interlock friction

WADIT® is very suitable to the ‘in and out’ installation method using the press in pilers

Hazardous Substances Testing

Leak-tightness studies for sheet pile interlocks under chemical influence of Creosote using the sealant Wadit

DMT

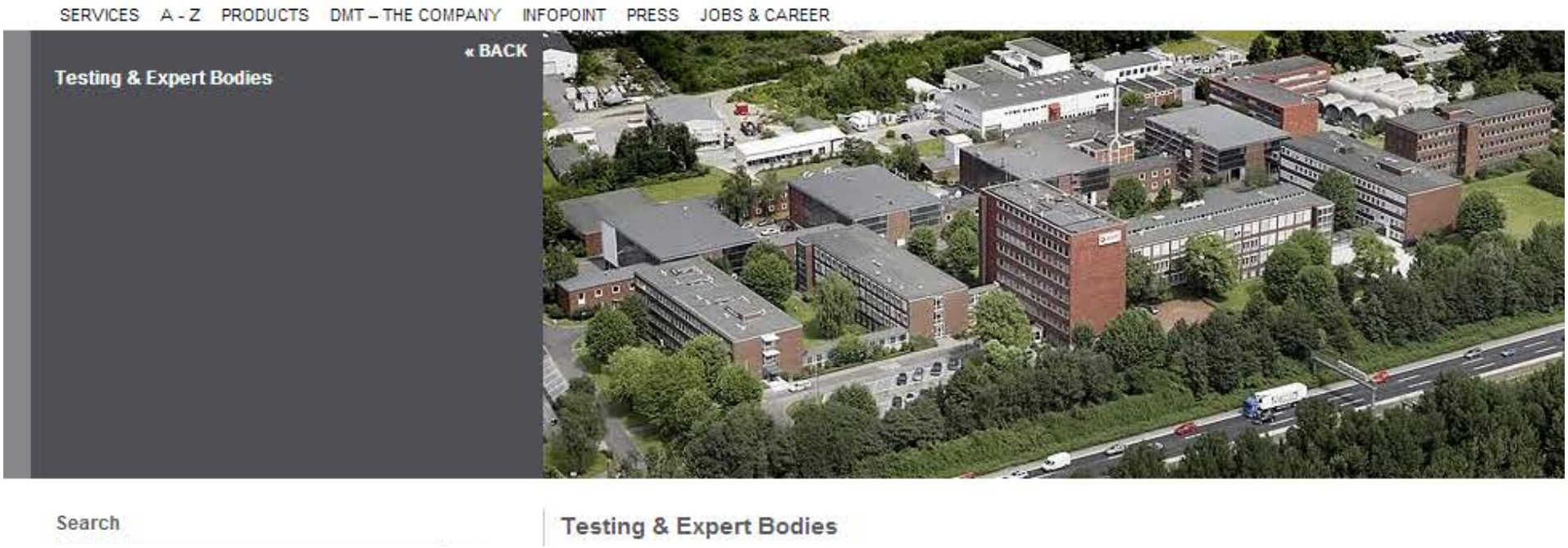
Hazardous Substances Testing

WADIT

Expert Body for Hazardous Substances in Mining

Expert body for the measurement and testing of hazardous substances in terms of their potential risk to the environment and in the workplace.

DMT



Hazardous Substances Testing

Leak-tightness studies for sheet pile interlocks under chemical influence of Creosote using the sealant Wadit

DMT

C. residence time 72 hours below 30℃

The 72 hour sample below 30℃ showed during the test with water no leakages.

A structure change of Wadit® could not be found. The flexibility remained.

The contact power of Wadit® is unchanged.

← **72 hours below 28F**
No leakage
No change in bond and flexibility

D. residence time 48 hours, direct contact with Creosote

The 48 hour sample showed during the test with water no leakages.

A structure change of Wadit® could not be found. The flexibility remained.

The contact power of Wadit® is unchanged.

← **48 hours room temp**
No leakage
No change in bond and flexibility

Chemical Resistance

WADIT

Acids

Alcohols

Creosols

TEAs

1 Acetaldehyde	N	36 Calcium acetate	OK	71 Ethyl cellulose	OK	106 Lead nitrate	OK								
2 Acetic acid (10/RT)	N	37 Calcium bissulfite	OK	72 Ethyl chloride	OK	107 Lead sulfamate	OK	141 Phenol	OK						
3 Acetone	N	38 Calcium chloride	OK	73 Ethyl chlorohydrin	OK	108 Linseed oil	OK	142 Phosphoric acid	OK						
	K	39 Calcium hydroxide	OK	74 Ethylene diamine	OK	109 Liquifide petroleum gas	OK	143 Potassium chloride	OK						
	K	40 Calcium hypochlorite	OK	75 Ethylene glycol	OK	110 Lubricating oil	OK	144 Potassium cyanide	OK						
	K	41 Calcium nitrate	OK	76 Ethyl oxalate	OK	111 Magnesium chloride	OK	145 Potassium dichlomate (10/RT)	OK						
	K	42 Calcium sulfide	OK	77 Ethyl silicate	OK	112 Magnesium hyroxide	OK	146 Potassium hydoxi	OK						
8 Aluminum chloride	OK	43 Carbon dioxide	OK	78 Fatty acid	OK	113 Magnesium sulfate	OK	147 Potassium permang	OK						
9 Aluminum fluoride	OK	44 Carbonic acid	N	79 Ferric chloride	OK	114 Maleic acid	OK	148 Potassium sulfate	OK						
10 Aluminum nitrate	OK	45 Castor oil	OK	80 Ferric sulfate	OK	115 Malic acid	OK	149 Propane	OK						
11 Aluminum sulfate	OK	46 Cellsolve	N	81 Fluorboric acid	OK	116 Marcuric chloride	OK	150 Propyl alcohol	OK						
12 Ammonia gas	OK	47 Cellsolve,Acetate	OK	82 Fluosilicic acid	OK	117 Marcury	OK	151 Propylene Glycol	OK						
13 Ammonium carbonate	OK	48 Cellsolve,Butyl	OK	83 Formaldehyde (40/RT)	OK	118 Methyl alcohol	OK	152 Pyridine	OK						
14 Ammonium chloride	OK	49 Chlorinated solvents	N	84 Formic acid (25/RT)	NO	119 Methyl ethyl ketone	OK	153 Salicylic acid	OK						
[illegible]	N	50 Chromic acid (2/70)	N	85 Fuel oil	OK	120 Mineral oil	OK	154 Salt water	OK						
		51 Citric acid	OK	86 Gasoline	OK	121 Monoethanolamine	OK	155 Silicon greases	OK						
		52 Copper chloride	OK	87 Gelatin	OK	122 Motor Oil	OK	156 Silicon oil	OK						
		53 Copper cyanide	OK	88 Galuber's salt	OK	123 Naptha	OK	157 Silver ritrate	OK						
[illegible]	OK	54 Copper sulfate	OK	89 Glycerin	OK	124 Natural gas	OK	158 Soap solutions	OK						
20 Aniline dyes	OK	55 [illegible]		90 Hexane	OK	125 Nickel acetate	OK	160 Sodium bicaarbonate	OK						
21 Lard oil	OK	56 [illegible]		91 Hexyl alcohol	N	126 Nickel chloride	OK	161 Sodium bisulfate	OK						
22 Arsenic acid	OK	57 [illegible]		92 Hydrobromic acid	N	127 Nikkel sulfate	OK	162 Sodium bisulfite	OK						
23 Asphalt	OK	58 Cyclohexanone	OK	93 Hydrochloric acid 3/RT)	OK	128 Nitric acid (10/RT)	NO	163 Sodium borate	OK						
24 ASTM oil NO.1	OK	59 Developing sulutions(Hypos)	OK	94 Hydrochloric acid	OK	129 Nitroethane	OK	164 Sodium chloride	OK						
25 ASTM reference fuel	OK	60 Dibutyl phthalate	OK	95 Hydrogen	OK	130 Nitromethane	OK	165 Sodium cyanide	OK						
26 Barium chloride	OK	61 Diesel Fuel	OK	96 Hydrogen peroxide	N	131 Nitrogen	OK	166 Sodium hydroxide (1	N						
27 Barium hydroxide	OK	62 Diethylene glycol	OK	97 Hydrogen sulfide	N	132 Octyl alcohol	OK	167 Sodium hydroxide	N						
28 Barium sulfate	OK	63 Diisopropyl ketone	OK	98 Hydroquinone	OK	133 Oleic acid	OK	168 Sodium hypochlorite	OK						
29 Barium sulfide	OK	64 Dimethyl formamide	OK	99 Hydrochlorus acid	OK	134 Oleive oil	OK	169 Sodium metaphosp	OK						
30 Benzene	N	65 Diocthyl phthalate	OK	100 Isobutyl alcohol	OK	135 Oxalic acid	OK	170 Sodium nitrate	OK						
31 Benzine	N	66 Dioxane	OK	101 Isopropyl alcohol	OK	136 Oxygen	OK	1							
32 Benzyl alcohol	OK	67 Ethanolamine	OK	102 Jet Fuel	OK	137 Ozone	OK	1							
33 Boric acid	OK	68 Ethyl acetate	N	103 Lacquer	OK	138 Palmitic acid	OK	1							
34 Butane	OK	69 Ethyl aceetoacetate	OK	104 Lactic acid	OK	139 Petroleum	OK	1							
35 Butyl alcohol	OK	70 Ethyl alcohol (Ethanol)	OK	105 Lead acetate	OK	140 Phenyl hydrazine	OK	175 Sodium sulfide	OK						

State assumes quantities as found in typical cases, we are happy to arranging actual testing of your soil at no extra cost.

Hazardous Substances Testing

WADIT

DMT

Conclusions

The sheet pile locker, which were sealed with Wadit®, show no leakages under the above discribed conditions. ← **No leakage**

No Influences on the Wadit® could be detected by diluted (with soil) or by undiluted (without soil, direct contact with the test sample) Creosote. ← **No influence on Wadit diluted or undiluted**

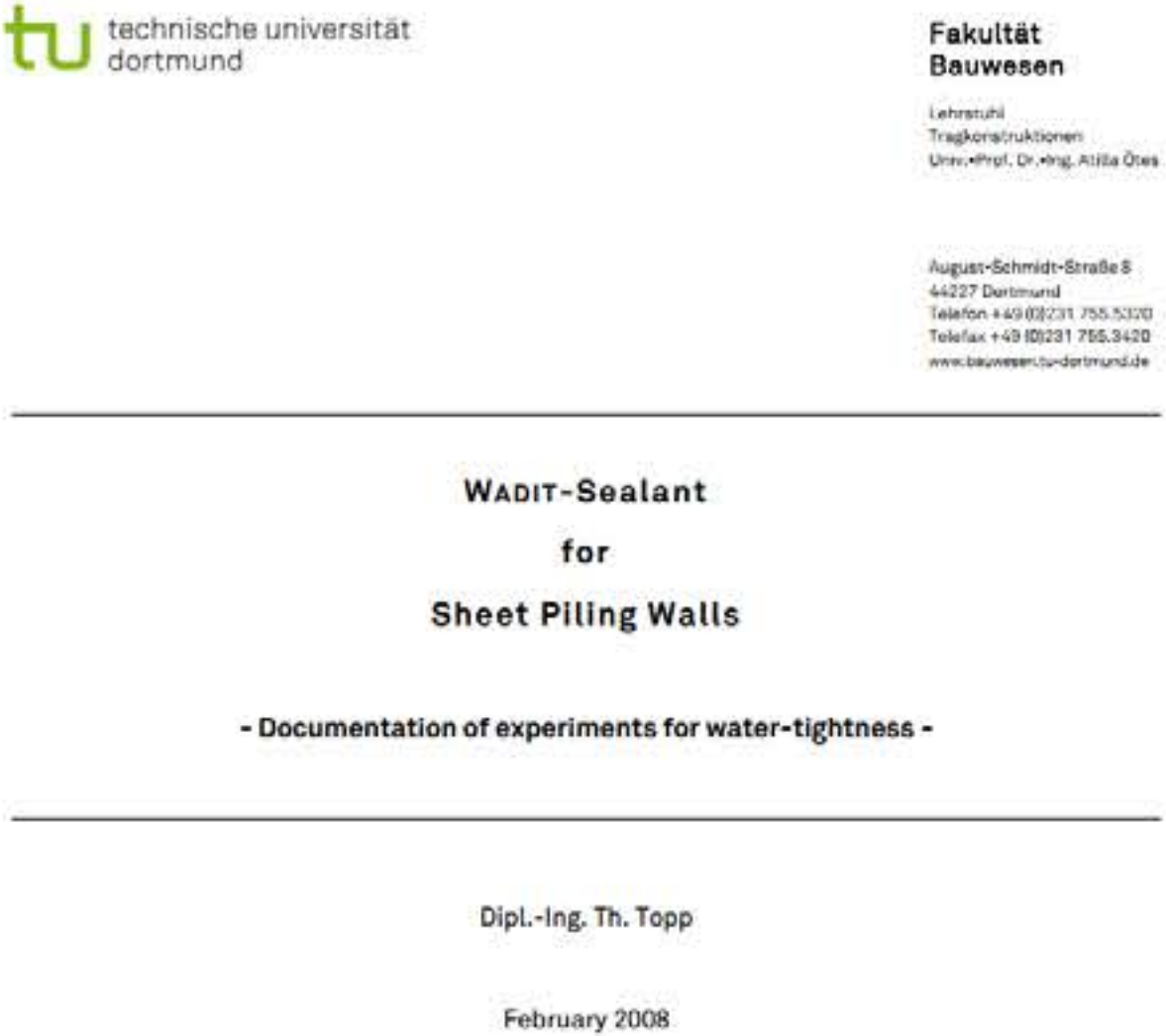
The Wadit® shows no visible changes and alterations regarding the contact power and flexibility. ← **No change in contact power and flexibility**

Kind regards
DMT GmbH & Co. KG

(Kappermagel) (Grube)

For Water Tightness

WADIT



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WADIT-Sealant

for

Sheet Piling Walls

- Documentation of experiments for water-tightness -

Dipl.-Ing. Th. Topp

February 2008

For Water Tightness

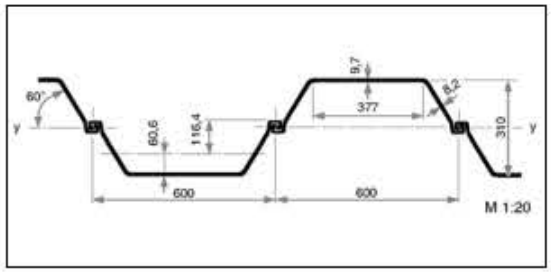


Figure 4:
LARSSEN-Sheet pile (Type 603)

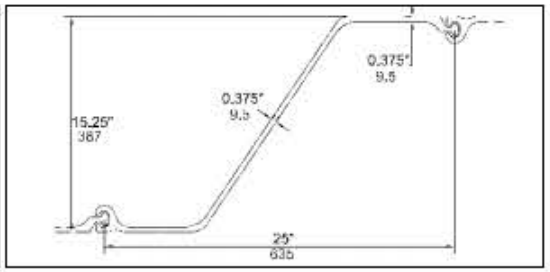
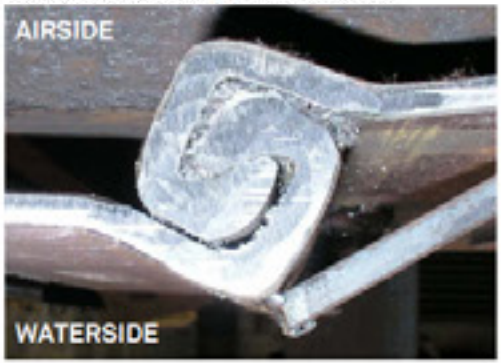
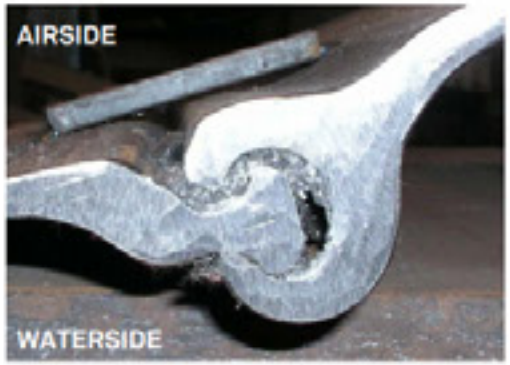


Figure 5:
PZC Sheet pile (Type PZC 18)





For Water Tightness

Test setup
without specimen

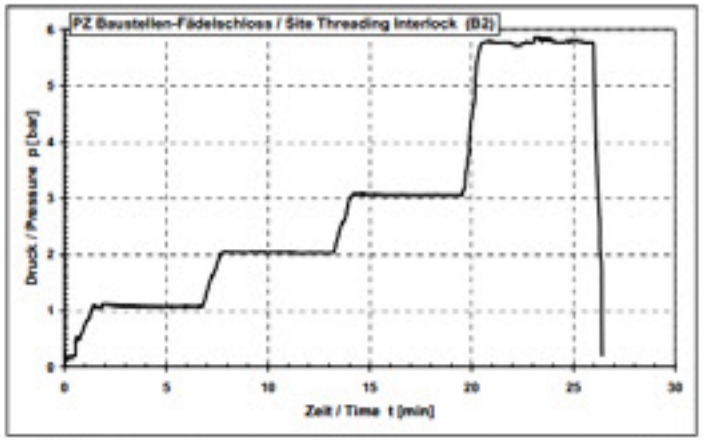
Test setup
with specimen

Pressure control
with Manometer

For Water Tightness

Ball & Socket Lock

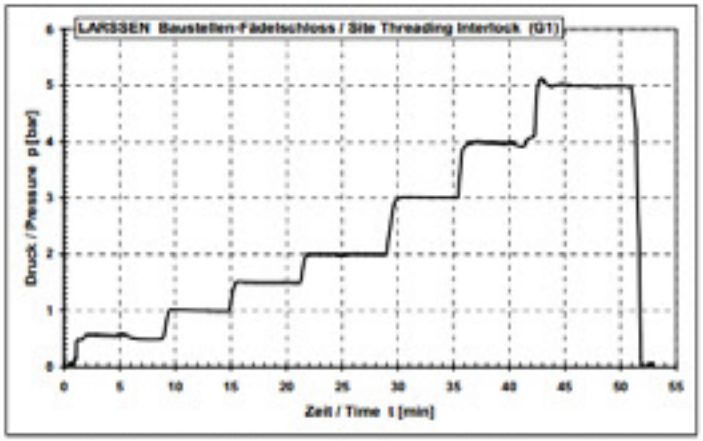
Test Flow:



Temperature:	15 °C / 59 °F
Test Result:	No water flow

Larssen Lock

Test Flow:



Temperature:	16 °C / 61 °F
Test Result:	No water flow

For Potable Water

Examining authority:
State Trade Supervision Department for Bavaria (LGA)
Institute for Environmental Geology and Contaminated Sites

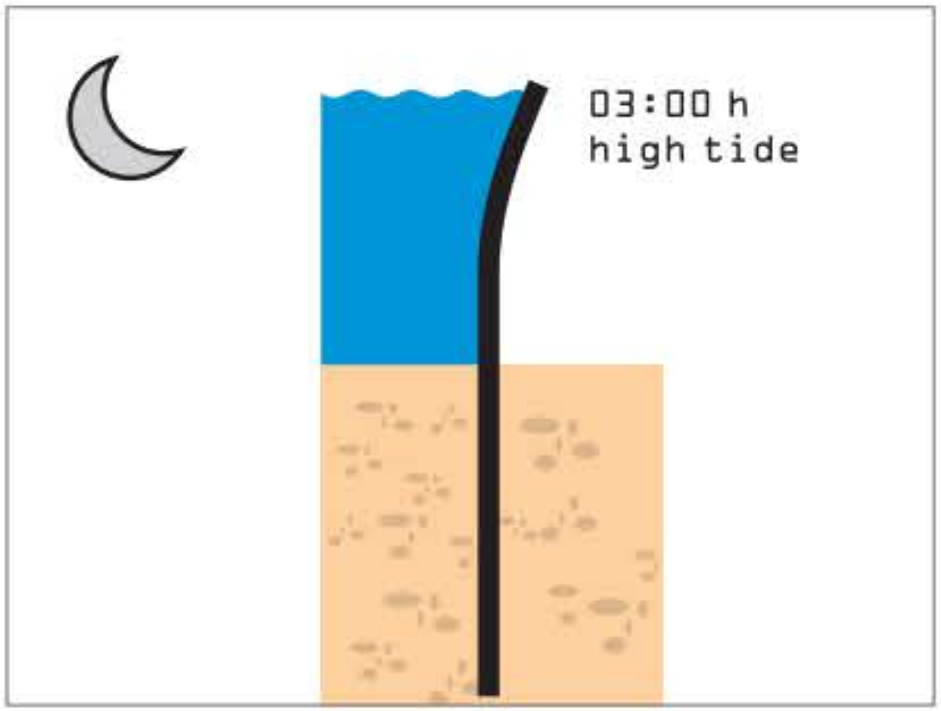
"The reports from the LGA come to the conclusion that WADIT® sealing compound can be used as a sealing compound in sheet pile walls for ground and surface water without restriction."

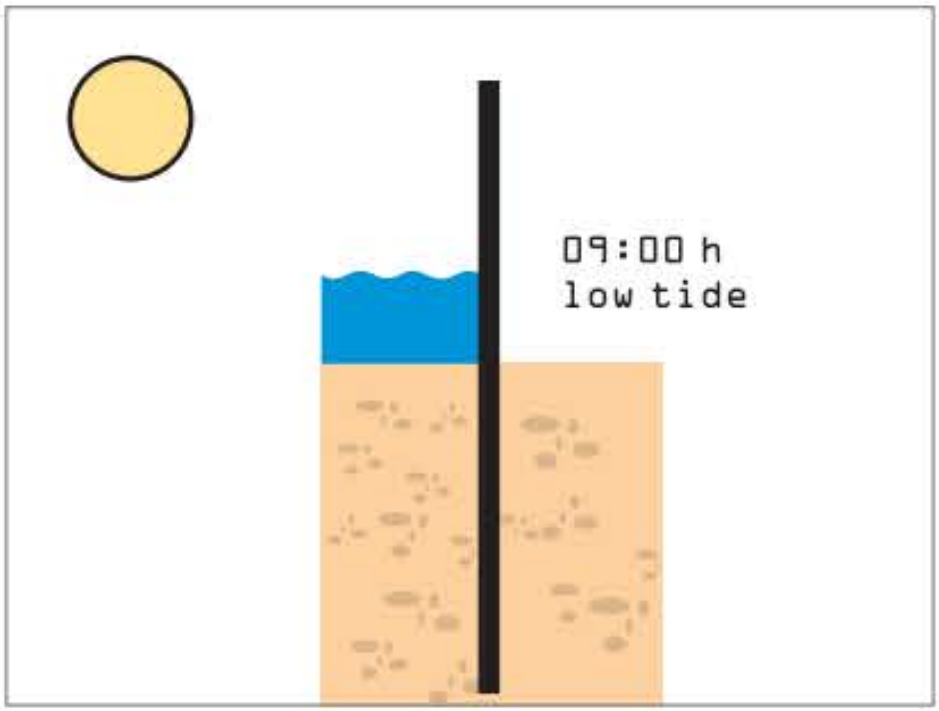
"there is no concern of harmful effects in the catchment area of drinking water collection systems."

Bond = Durability

Wadit® has exceptional bond to the steel

It prevents corrosion in the interlocks and can be used with coatings.





Filling of Interlocks

Piling can be driven within 30 mins, or let sit for months.

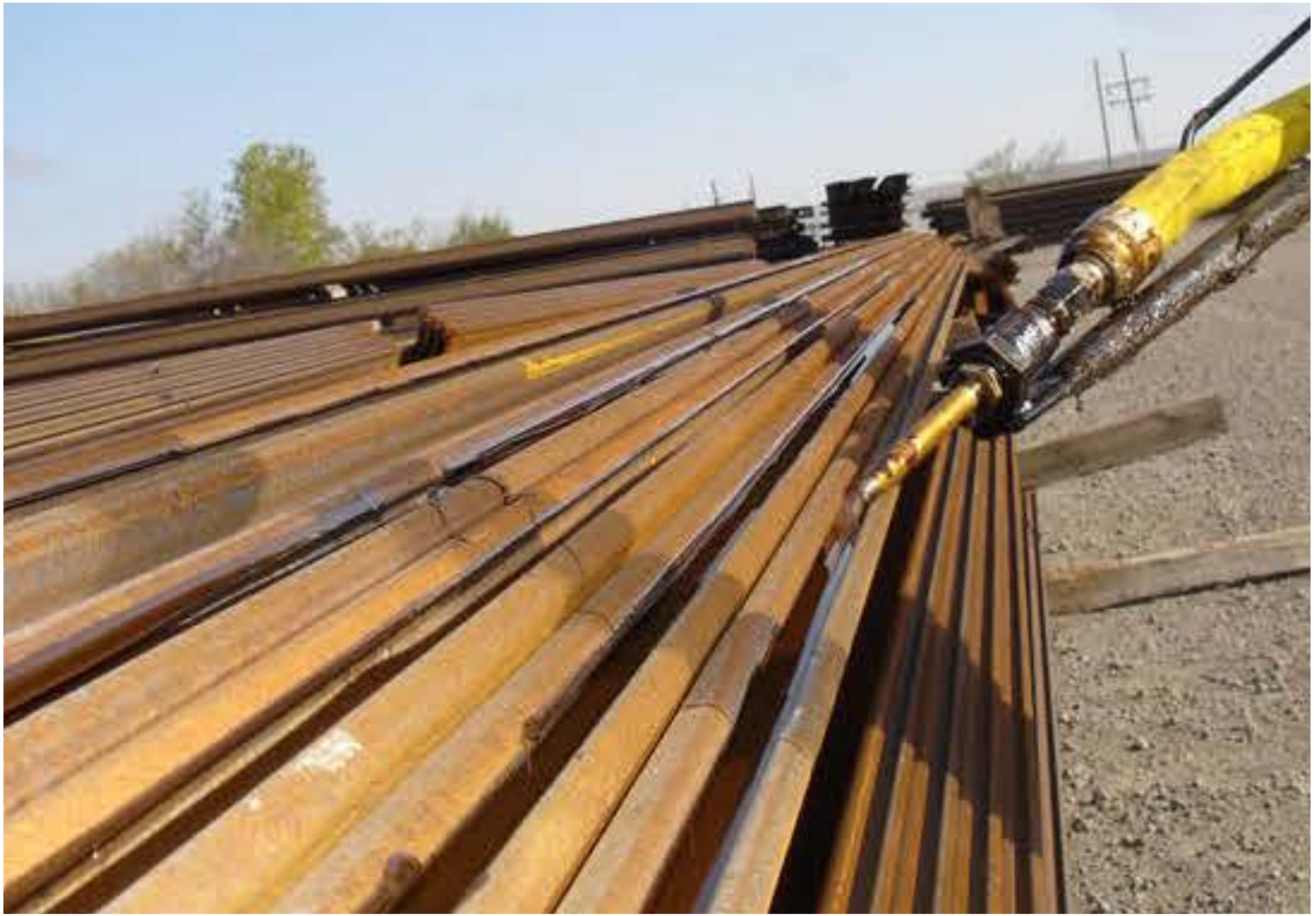
A professional 2-man crew can install up to 5,000 ft per day

 LARSSEN:	30-40%
 HOESCH:	30-40%
 PZ/PZC:	35-45%
 COLD FORMED:	40-50%

Application

Application

Application



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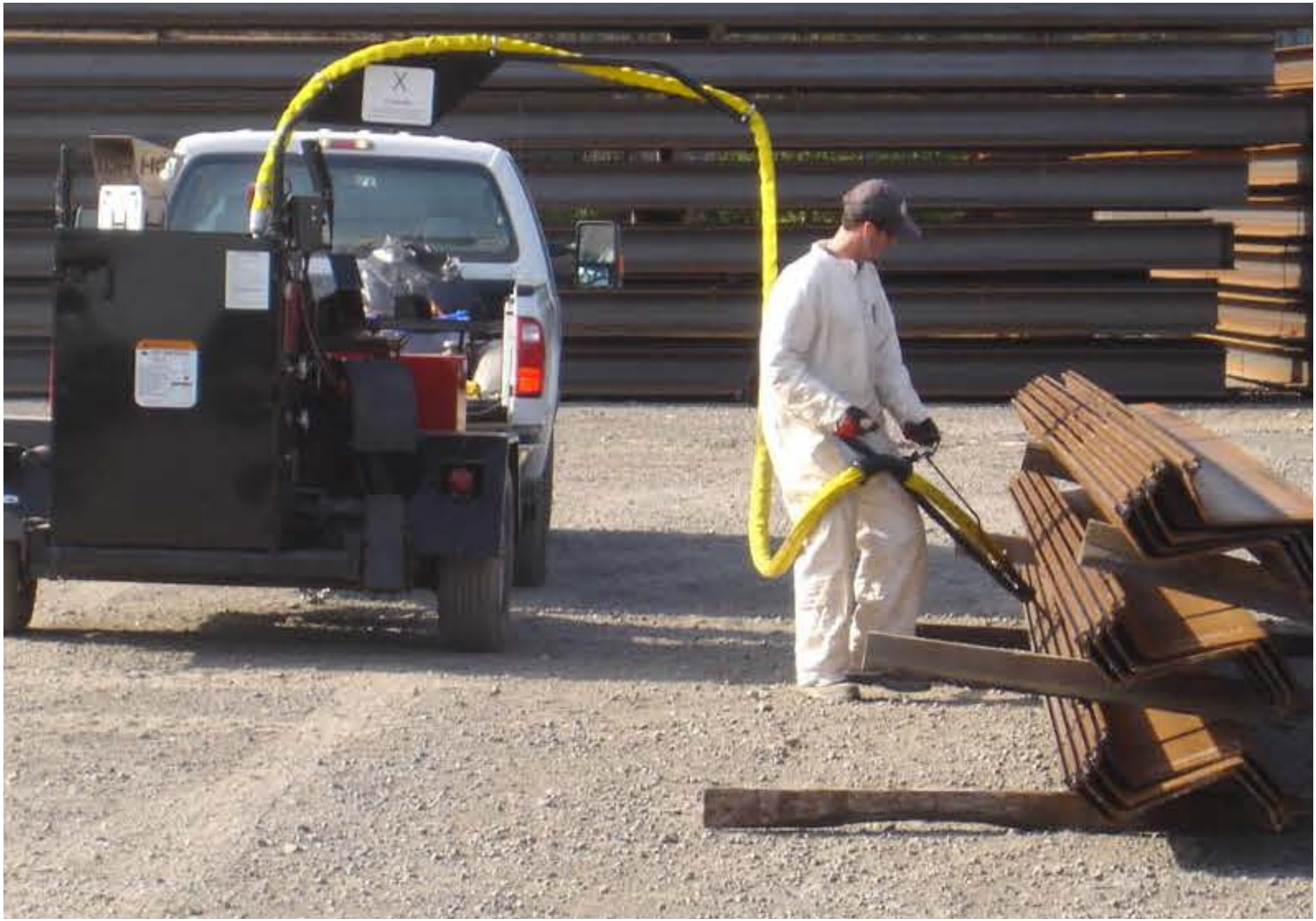

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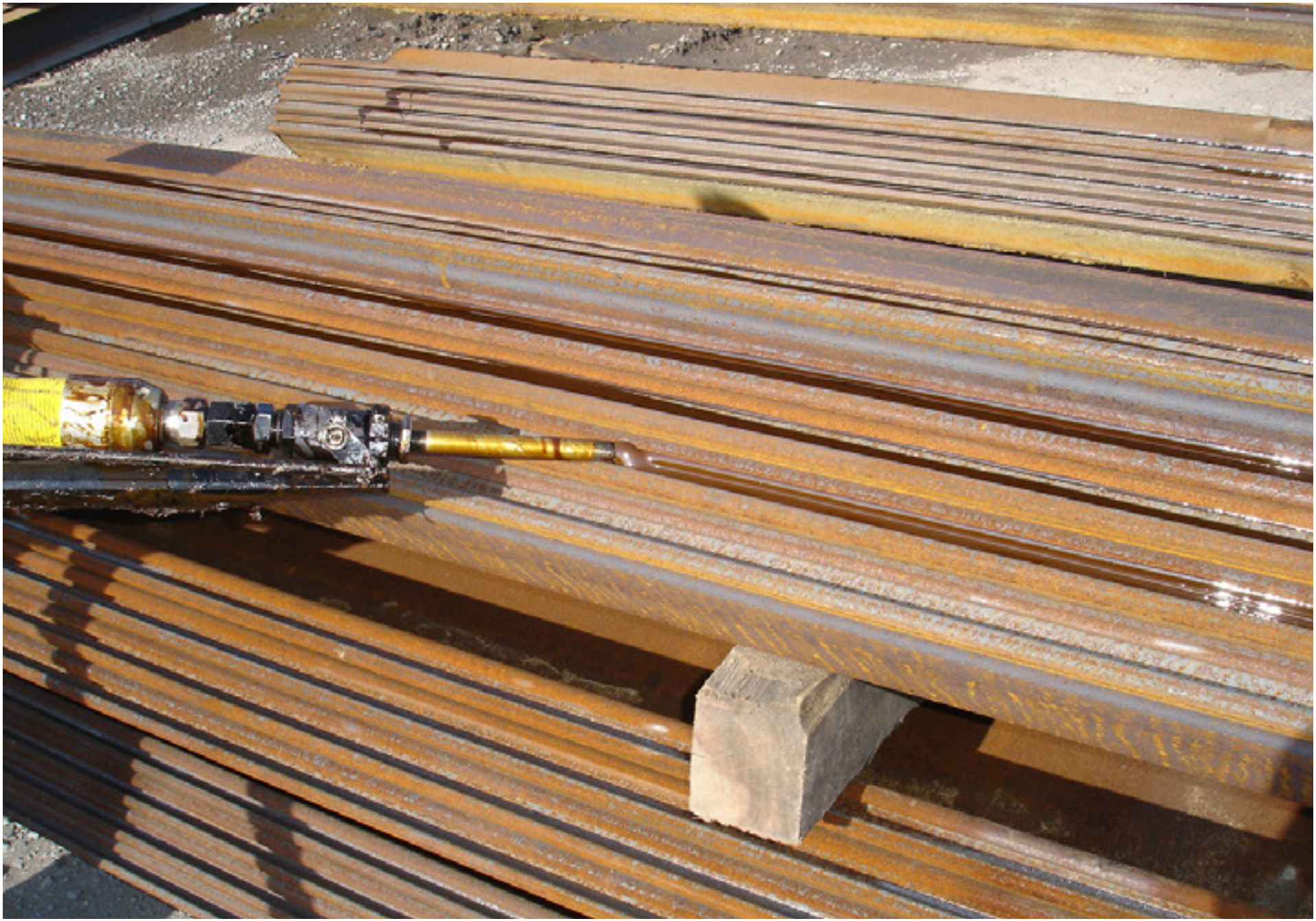
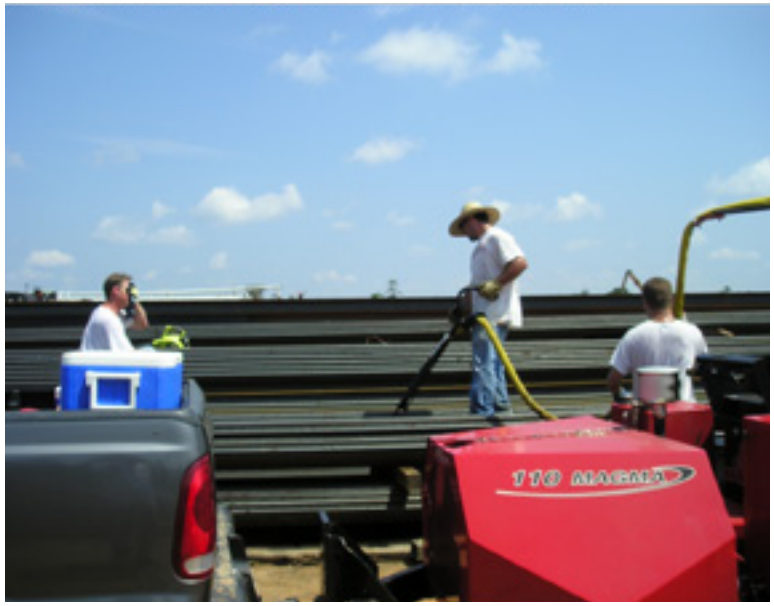
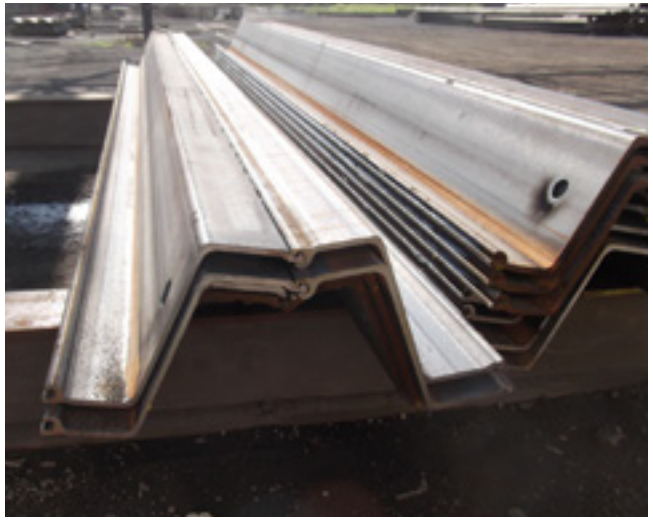


Application

Application





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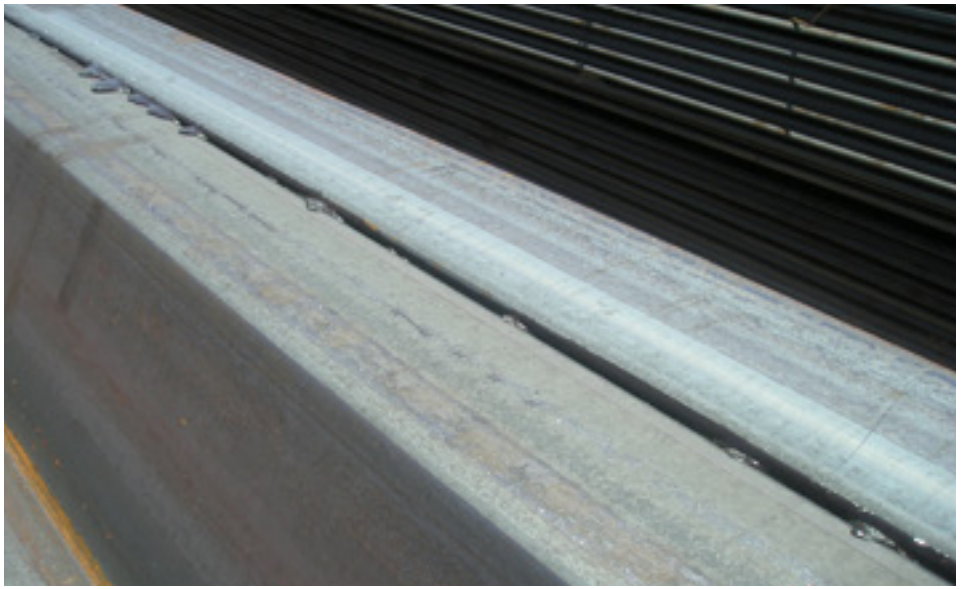

What is it

Ingenious sealant made exclusively for sheet piling

A natural sustainable raw material

Why it is different

Environmentally friendly – use with drinking water – non toxic

Excellent chemical resistance

Use in extreme hot or cold

Water resistant to 130 ft

Corrosion inhibitor – increases durability

Lubricant to aid driving

Professionally applied at distributor or jobsite

Why it is different?

1. Ingenious sealant for sheet pile walls
2. Made exclusively for sheet piling
3. Environmentally friendly – use with drinking water – non toxic
4. Unique elasticity – does not harden or become brittle
5. Excellent chemical resistance
6. Use in extreme hot or cold
7. Water resistant to 130 ft
8. Corrosion inhibitor – increases durability
9. Lubricant to aid driving

Thank you.