QUOTATION SERVICE DESCRIPTION AND IMPORTANT NOTICES

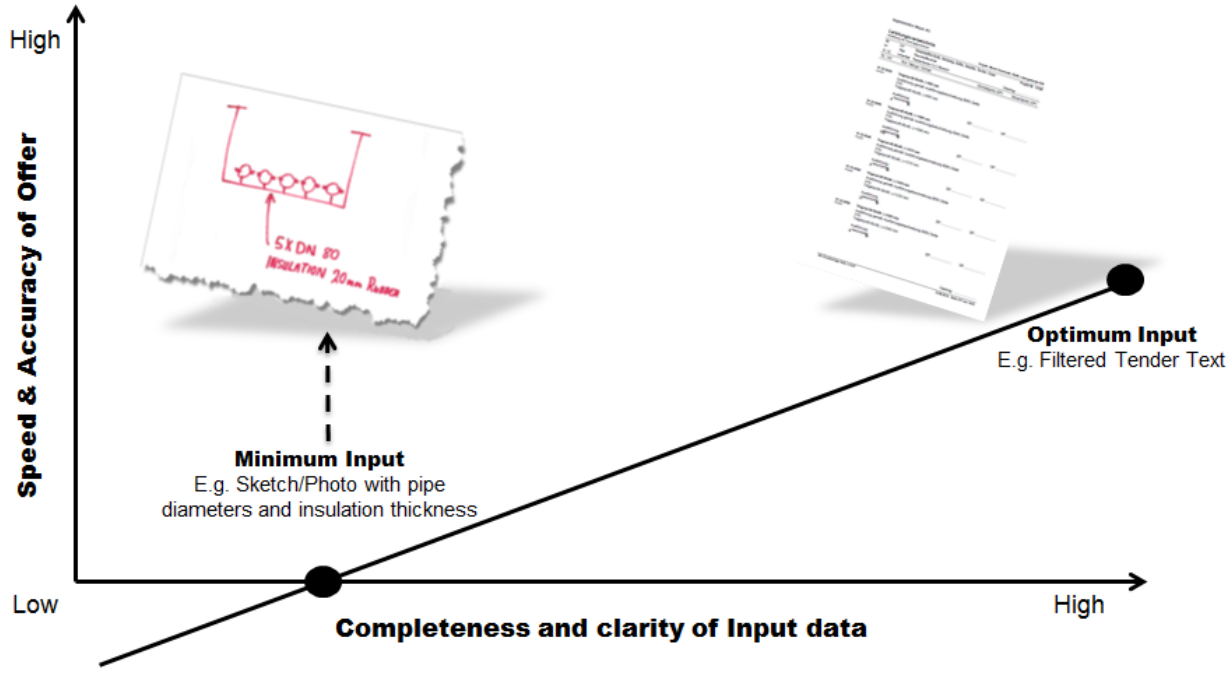
1. Quotation Service

1.1 Article Number: 2150593

1.2 Scope: Hilti provides a quotation for the supply of Hilti Anchor/Fire-stop/Installation products according to the requirements communicated by the customer. In the case that Hilti cannot provide a solution for a specific situation this will be clearly communicated to the customer. Calculation and/or design is not in scope for the Quotation Service, but can be ordered as a separate Calculation Service.

1.3 Cost: The 'Quotation Service' is a generally a **non-charged service.** If the effort to elaborate the quotation takes more than 8 man-hours to complete (e.g. due to the complexity of the data/requirements provided by the customer), Hilti reserves the right to charge for every additional hour at a rate equivalent to that set for the Calculation Service (see Hilti Online for rate **ADD LINK TO CALCULATION SERVICE EDITORIAL**). If the effort to elaborate the quotation is likely to exceed 8 man-hours the customer will be informed of this prior to the commencement of work. The customer can reduce the work package by selecting a representative area for the building in question.

The customer is also encouraged to provide clear and detailed service inputs to increase the productivity of the Hilti Supporting Engineer and increase the chances of completion of the offer within the 8 man-hour effort limit. The most detailed documentation which returns the greatest service output is a Filtered Tender Text.



1.4 Service Inputs

Unless provided by the customer, Hilti takes the following inputs as default:

- Corrosive Environment:…… Indoor application- Eurocode C1 & C2
- Base Material: …….. Concrete, Cracked, C20/C25
- Static loading: …….. Recommended loads of pipe suppliers
- Spacing: …….. Recommended spacing from pipe suppliers or if not limiting at the discretion of the Hilti designer
  (Distance between Supports)
- Design Methodology according to: …….. Applicable European Codes (Eurocode/ETAG)
- Deflection limits of channel members..... L/200

1.5 Quotation Service Output documents

The Calculation Service Output Documents are the following:

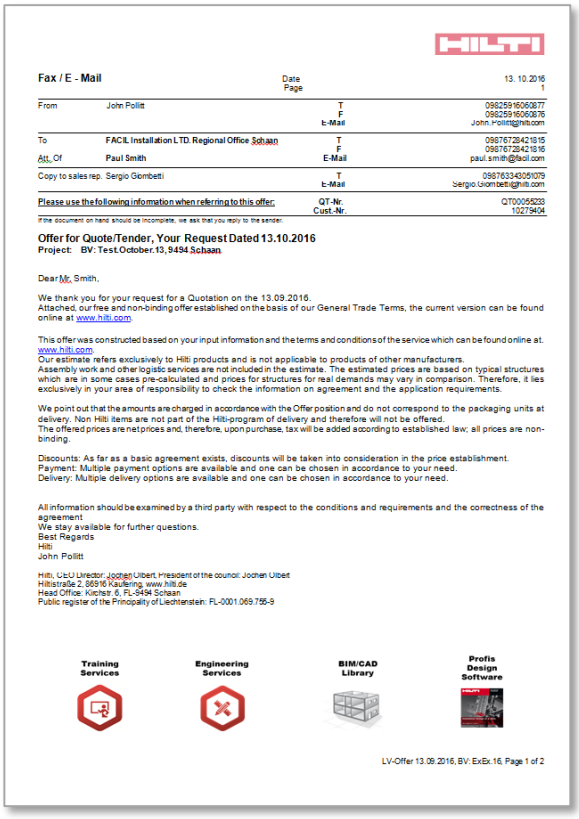
- **Summary of request**.
- **Commercial offer**

Summary of Request

Prior to commencement of work on the offer Hilti will send the customer a summary of request which details the technical scope of work and estimated delivery date. The customer is required to check its accuracy and completeness and inform Hilti of any misalignments in writing per email.

Commercial Offer

The commercial offer consists of a PDF Offer Document containing a list of supports offered with pricing. (The offer is non-binding unless a binding offer is specifically requested. Preparation of a binding offer may result in the accrual of additional costs which Hilti may choose to invoice to the customer and will be determined on a case by case basis).



Fax / E - Mail

Date 13. 10.2016
Page 1

From John Pollitt
T 0982591606877
F 0982591606876
E-Mail John.Pollitt@hilti.com

To FACIL Installation LTD. Regional Office Schaan
Att. Of Paul Smith
T 09876728421815
F 09876728421816
E-Mail paul.smith@facil.com

Copy to sales rep. Sergio Giombetti
T 09876334061079
E-Mail Sergio.Giombetti@hilti.com

Please use the following information when referring to this offer:
QT-Nr. QT00055233
Cust.-Nr. 10279404

If the document on hand should be incomplete, we ask that you reply to the sender.

Offer for Quote/Tender, Your Request Dated 13.10.2016
Project: BV: Test October.13, 9494 Schaan

Dear Mr. Smith,

We thank you for your request for a Quotation on the 13.09.2016.
Attached, our free and non-binding offer established on the basis of our General Trade Terms, the current version can be found online at www.hilti.com.

This offer was constructed based on your input information and the terms and conditions of the service which can be found online at. www.hilti.com.
Our estimate refers exclusively to Hilti products and is not applicable to products of other manufacturers.
Assembly work and other logistic services are not included in the estimate. The estimated prices are based on typical structures which are in some cases pre-calculated and prices for structures for real demands may vary in comparison. Therefore, it lies exclusively in your area of responsibility to check the information on agreement and the application requirements.

We point out that the amounts are charged in accordance with the Offer position and do not correspond to the packaging units at delivery. Non Hilti items are not part of the Hilti-program of delivery and therefore will not be offered.
The offered prices are net prices and, therefore, upon purchase, tax will be added according to established law; all prices are non-binding.

Discounts: As far as a basic agreement exists, discounts will be taken into consideration in the price establishment.
Payment: Multiple payment options are available and one can be chosen in accordance to your need.
Delivery: Multiple delivery options are available and one can be chosen in accordance to your need.

All information should be examined by a third party with respect to the conditions and requirements and the correctness of the agreement.
We stay available for further questions.
Best Regards
Hilti
John Pollitt

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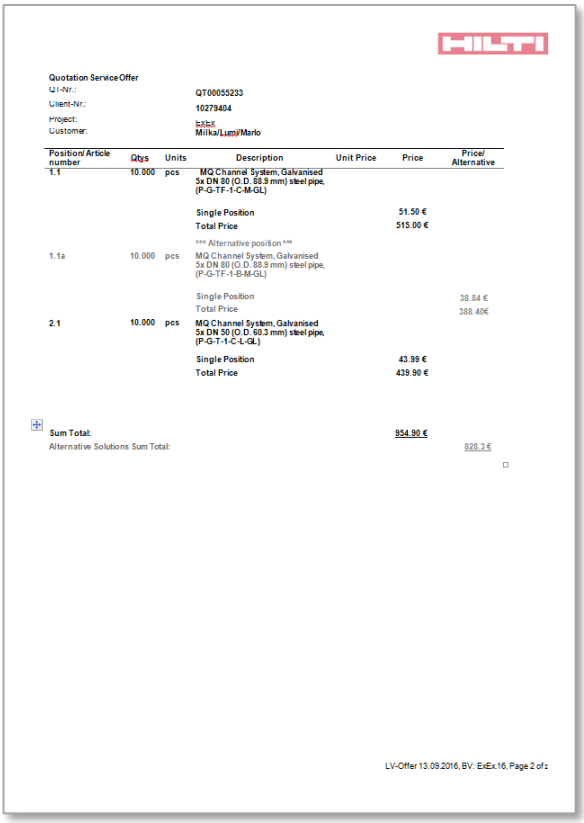
Head Office: Kirchstr. 6, FL-9494 Schaan
Public register of the Principality of Liechtenstein: FL-0001.069.755-9

Training Services | Engineering Services | BIM/CAD Library | Profis Design Software

LV-Offer 13.09.2016, BV: ExEx.16, Page 1 of 2



Quotation Service Offer
QT-Nr.: QT00055233
Client-Nr.: 10279404
Project: ExEx
Customer: Milka/Lumi/Mario

Position/ Article number	Qtys	Units	Description	Unit Price	Price	Price/ Alternative
1.1	10.000	pcs	MQ Channel System, Galvanised 5x DN 80 (O.D. 88.9 mm) steel pipe, (P-G-TF-1-C-M-GL)			
			Single Position		51.50 €	
			Total Price		515.00 €	
			*** Alternative position ***			
1.1a	10.000	pcs	MQ Channel System, Galvanised 5x DN 80 (O.D. 88.9 mm) steel pipe, (P-G-TF-1-B-M-GL)			
			Single Position			38.84 €
			Total Price			388.40€
2.1	10.000	pcs	MQ Channel System, Galvanised 5x DN 50 (O.D. 60.3 mm) steel pipe, (P-G-T-1-C-L-GL)			
			Single Position		43.99 €	
			Total Price		439.90 €	
Sum Total:					954.90 €	
Alternative Solutions Sum Total:						828.3 €

LV-Offer 13.09.2016, BV: ExEx.16, Page 2 of 2

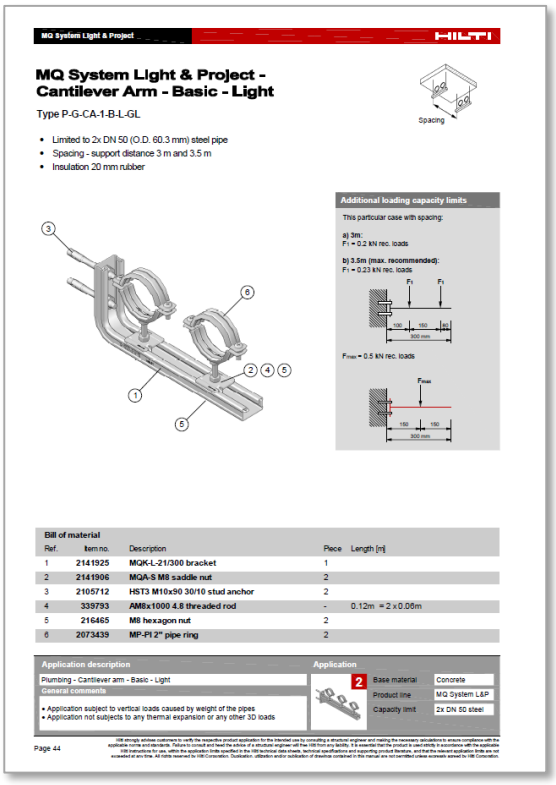
The offer comprises of a list of positions, each position represents a support or application which is intended to fulfil the requirements of the customer request. A standard position 1.1 for example may be accompanied by an alternative position 1.1a. Alternative positions are identified by the suffix (a) are grey in colour and have a grey vertical line along their left margin. The pricing for the alternative position also has its own space in the right most column of the page. Alternative positions offer the customer economical solutions which may contain parts which require some additional effort during installation or offer less flexibility.

The alternative positions are summed up to give the ‘Alternative Solutions Sum Total’ in the right most column at the bottom of the offer document in grey font. When no alternative for a position exists the standard position value is taken to allow the ‘Alternative Solutions Sum Total’ to be calculated. This

means the ‘Alternative Solutions Sum Total’ is always a complete offer. The standard positions ‘Sum Total’ is summed in the same way and can be found in the second from right column second row from the bottom of the offer document.

The offer may be partially or totally constructed using ‘Typicals’.
A ‘Typical’ is a pre-calculated support solution which uses a pre-determined Bill of Materials (BoM) and assumes typical loading requirements
A ‘Typical Page’ can be found in ‘Typical Manuals’ provided by a Hilti representative. A ‘Typical Page’ contains the following information:

- Base Material
- Product line
- Capacity limit
- Loading capacity limits
- Spacing
- Insulation thickness (if applicable)
- Isometric drawing w/ or w/o a referenced Bill of Materials.


MQ System Light & Project

MQ System Light & Project - Cantilever Arm - Basic - Light

Type P-G-CA-1-B-L-GL

- Limited to 2x DN 50 (O.D. 60.3 mm) steel pipe
- Spacing - support distance 3 m and 3.5 m
- Insulation 20 mm rubber

Spacing

Additional loading capacity limits

This particular case with spacing:

a) 3m:
F_1 = 0.2 kN rec. loads

b) 3.5m (max. recommended):
F_1 = 0.23 kN rec. loads

F_{max} = 0.5 kN rec. loads

Bill of material

Ref.	Item no.	Description	Piece	Length [m]
1	2141925	MQK-L-21/300 bracket	1	
2	2141906	MQA-S M8 saddle nut	2	
3	2105712	HST3 M10x90 30/10 stud anchor	2	
4	339793	AM8x1000 4.8 threaded rod	-	0.12m = 2 x 0.06m
5	216465	M8 hexagon nut	2	
6	2073439	MP-PI 2" pipe ring	2	

Application description

Plumbing - Cantilever arm - Basic - Light

General comments

- Application subject to vertical loads caused by weight of the pipes
- Application not subjects to any thermal expansion or any other 3D loads

Application

2

Base material	Concrete
Product line	MQ System L&P
Capacity limit	2x DN 50 steel

Page 44

1.6 Not provided as standard Output of Quotation Service

Unless specifically requested by the customer the Quotation service **does not** provide pricing for solutions that consider the following technical requirements:

- Supports considering Thermal Expansion/Contraction
- Seismic Resistant Design
- Fire Resistant Design
- Dynamic Loading
- Pipe Insulation / Avoid Condensation
- Specific Approvals
- Other requirements

2. General Terms and Conditions for provision of Hilti’s Quotation Services

An offer is prepared on the basis of you the customers input. It is subject to the correctness and completeness of the information you provide, and dependent on you having independently reviewed the list of requested products and services you require as well as any possible specifications provided by third parties (such as planners, developers) and their conformity to technical and legal requirements.

Our solutions exclusively refer to Hilti brand products and may not be transferred to products of other manufacturers. The offer does not include assembly work. Prices offered featuring the units “kg” and “m” are based on standard construction estimates of Hilti **Name of MO**, and may diverge from the actual application-related requirements. You are therefore fully and solely responsible for monitoring the information to ensure conformity with the actual application-related requirements.

We would like to additionally add that the amounts are calculated according to those required by the assembled solutions and do not correspond to the delivered packaging units. Items not included are not supplied by Hilti and therefore are not offered.

For the purpose of decreasing service lead time, the Hilti designer responsible for putting the ‘Offer’ together may use ‘typicals’ which are close to the required technical solution but not exactly those which would actually be needed to cover the technical requirements of the applications. The offer is therefore considered an estimate and non-binding. As a result if the customer wishes to be able to order the exact content of the Quotation offer they should make it clear when requesting the service that a binding offer is required and a . A Calculation may be required to fulfil the binding offer request and therefore

The prices quoted are net prices and therefore do not include any applicable value added tax, applicable at the legal rate; all prices are subject to change.

Discounts: If a framework agreement has been reached, any and all price discounts agreed to have been granted.

Payment: Any applicable payment conditions agreed to with you shall apply.

Delivery: Any applicable special delivery conditions agreed to with you shall apply.

All information must be monitored by you to ensure that it is accurate and in accordance with the actual conditions and requirements.

2.1 Details of Calculation Methods

Channel Design
Where possible channel design computation is carried out by the Hilti design software 'PROFIS' ("Software") which uses the calculation engine from the RSTAB framework software by Dlubal, analogous to the elastic-elastic method in conformance with DIN 18800.The connector design method is based on a combination of several calculation models following the principles of DIN 18800 and tests carried out by an independent institute (HTL Rankweil, Austria).

Buckling and Lateral Torsional Buckling (LTB): Buckling (flexural buckling) and LTB is not accounted for in PROFIS. The elastic stress check (stress utilization ratio) is determined in this regard solely for compression loads and St. Venant's torsion. If the Hilti Design Engineer determines that a LTB calculation is specifically required, buckling and LTB checks will be carried out separately.

Local Stress and deformation of members at places where load is manually entered is not considered. All connectors and strut connection interfaces provided by Hilti are developed considering local stress and deformation in accordance with the Eurocode.

Deflection: In consideration of deflection constraints, a single element (length: node to node or support to support) is taken into account. Up until strut lengths of 300 mm PROFIS allows for a maximum deflection of 1.5mm. For strut lengths greater than 300mm the maximum deflection is dependent on the strut length and is set by the design Engineer (typically L/200 unless otherwise specified by the customer).

The static analysis is performed on the basis of a stationary system. 2nd-Order analysis due to possible eccentricities or deflections in the design (deformation according to DIN 18800 or EC3) can be calculated if specifically requested by the customer but such calculations will have a significantly longer lead time and may be subject to additional charges over and beyond the defined hourly rate.

Fastener Design
Hilti Anchors are to be calculated according to the relevant anchor design guideline (EN-1992-4 or ETAG). Accurate Fastener specification is dependent on the receipt by Supplier of accurate Customer Data regarding base material design. If the base material indicated by the Customer Data it is not covered by the approval applicable for the relevant Fastener, IF ONSITE TESTING SERVICE HAS BEEN LAUNCHED IN THE RELEVANT MO DELETE SENTENCE (B) IF NOT DELETE SENTENCE (A) AND REMOVE UNDERLINES.
(A) Hilti offers a professional onsite testing service that will support the estimation of the anchor resistance.
(B) the Customer is required and solely responsible to evaluate the base material with the relevant Hilti Fastener in accordance with the relevant application and carry out onsite-tests in order to confirm the correct resistance of the anchor.

Hilti does not verify the proper installation of Fasteners or the connections between. Proper installation of Fasteners is critical to realising the design resistance of the Fastener – training is available on request – contact Supplier for information.