

Bauteilanschlüsse - von der Planung zur Ausführung im Handwerk

2. Norddeutsche Passivhauskonferenz
01.09.2010

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Gliederung

Zentrale Merkmale der Passivhaus – Bauweise

Aufgaben des Planers | Wärmebrücken vermeiden
Aufgaben des Planers | Luftdichtheit herstellen

Problematische Bauteilanschlüsse

Ausführung der Gewerke
Beispiele

Veränderungen in der Ausbildung Beispiele

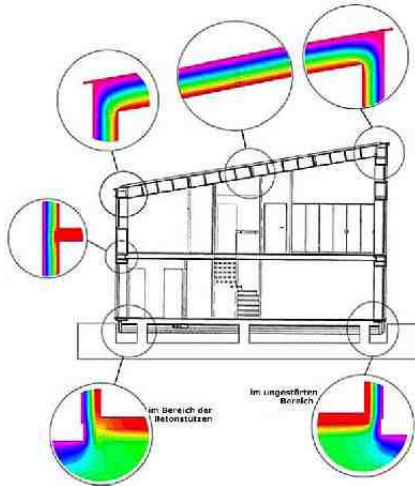
Fazit



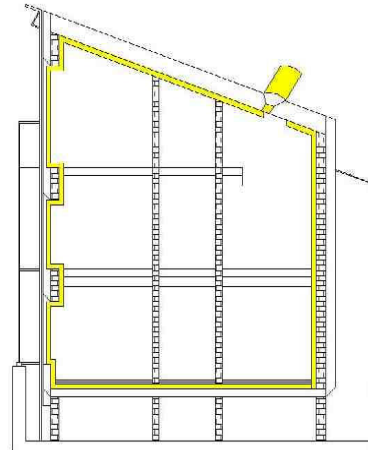
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Zentrale Merkmale der Passivhaus - Bauweise



Wärmebrückenfreiheit



Luftdichtheit



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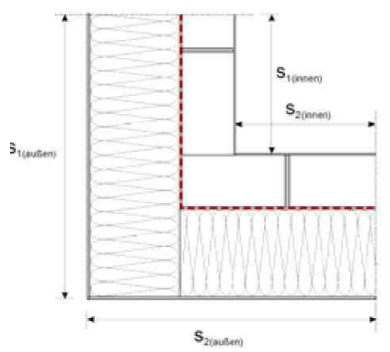
www.buildwithlake.eu



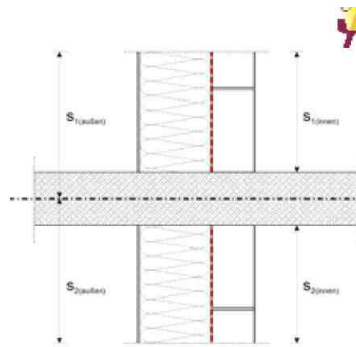
Aufgaben des Planers



Wärmebrücken



geometrische Wärmebrücken
 z. B. Außenkanten
 sind beherrschbar



konstruktive Wärmebrücken
 Durchdringungen, Auskragungen,
 Eindringungen, Rippen, (Balkon)
 Dämmstoffunterbrechungen
möglichst vermeiden!



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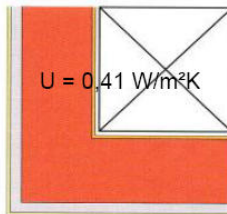
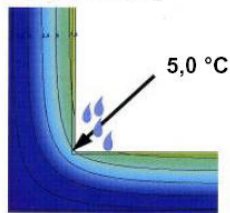
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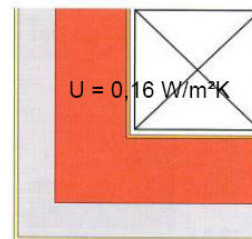
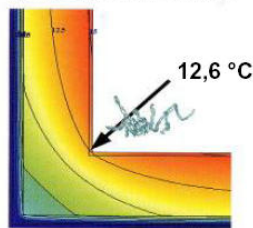
Aufgaben des Planers | Wärmebrücken vermeiden



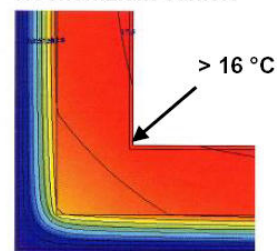
Vor Sanierung



Konventionell saniert



Hocheffizient saniert



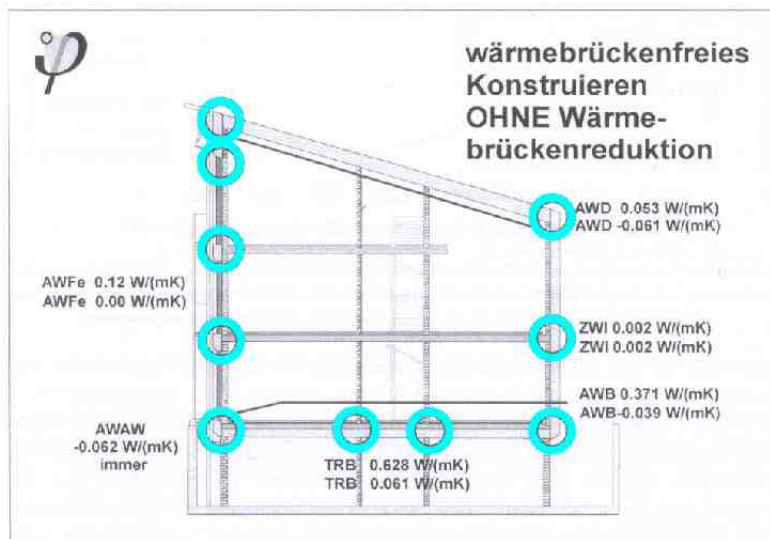
Detailanschluss Außenwandkante (mit Schrank)



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Aufgaben des Planers | Wärmebrücken vermeiden



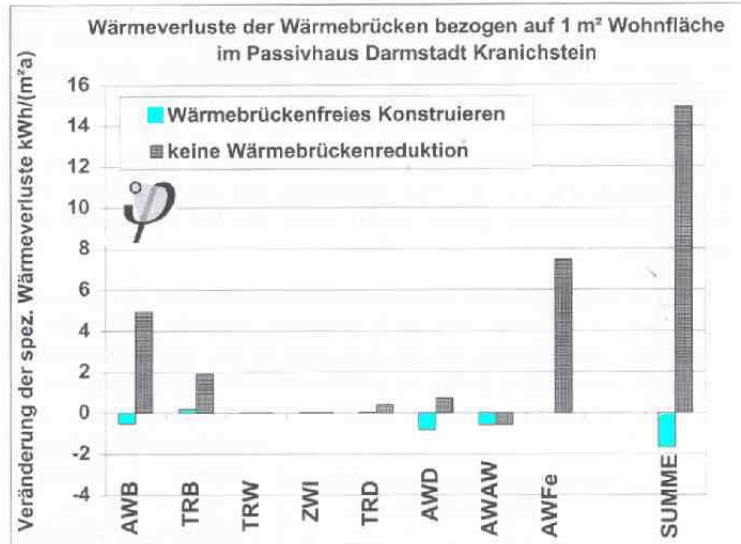
Quelle: Protokollband 16 PHI 2009



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Aufgaben des Planers | Wärmebrücken vermeiden



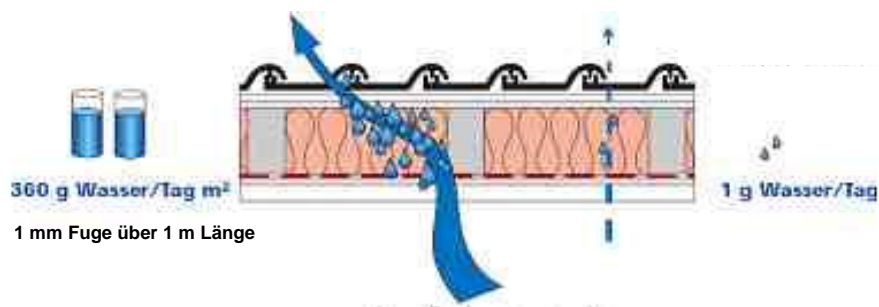
Quelle: Protokollband 16 PHI 2009



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Aufgaben des Planers | Luftdichtheit herstellen



Durchfeuchtung der Dämmschicht als Folge einer fehlerhaften Luftdichtheitsebene



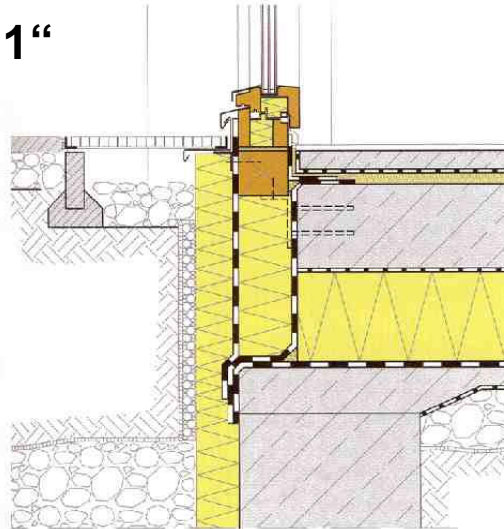
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Aufgaben des Planers



„DENKEN 1:1“



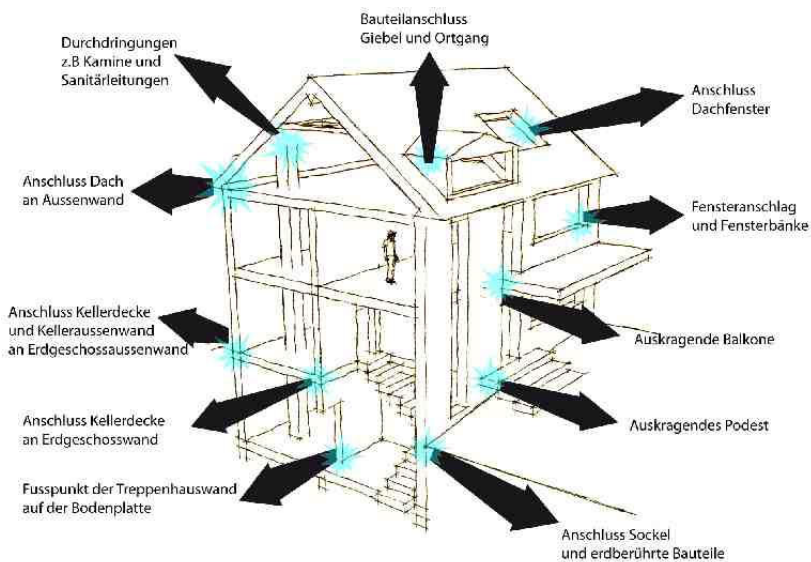
Quelle: PH Bauteilkatalog



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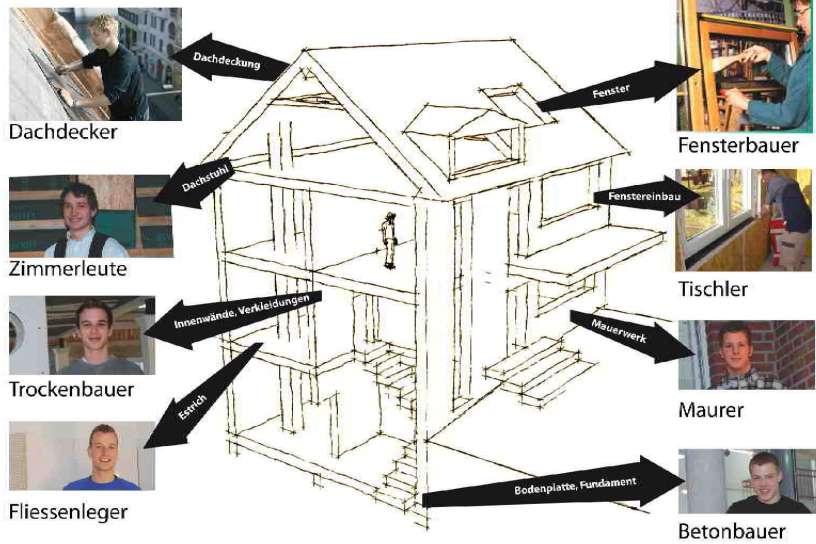
Problematische Bauteilanschlüsse



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Ausführung der Gewerke



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Beispiele aus der Praxis



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Beispiel Sanierung



Schlettstadter Strasse, Hamburg



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Beispiel Sanierung



Erforderlich: Putzschiene anbringen



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Beispiel Sanierung



Erforderlich: Genauigkeit beim Abkleben



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Beispiel Sanierung



Kleine Freiheit, Hamburg



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Beispiel Sanierung



Durchdringungen

Gewerkeschnittstellen zur Sicherung der Funktionsweise eines Passivhauses Zwischen:

- Elektrikern
- Dachdeckern
- Zimmerern
- Trockenbauern



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Beispiel Sanierung



Fenster- und Türöffnungen

Gewerkeschnittstellen zur Sicherung der Funktionsweise eines Passivhauses Zwischen:

- Fensterbauern
- Maurer
- Zimmerleute



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Beispiel Sanierung



Leitungsführung

- Elektriker
- Lüftungsbauer
- Zimmerer
- Trockenbauer
- Anlagentechniker



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Beispiel Neubau



Genauigkeit

Zeitliches
Nebeneinander
von Gewerken



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Schlussfolgerung



Neue Anforderungen an die Facharbeit auf der Baustelle:

- Höchste **Sorgfalt** bei der Ausführung der wärmedämmenden Hülle
- Vermeidung sämtlicher Wärmebrücken bei **Anschlüssen**
- Sicherung der **Luftdichtheit** der Gebäudehülle
- **Zusammenspiel** der einzelnen Ausführenden der Bau- und Anlagentechnik



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Fazit



Die Facharbeiter müssen zu Gewährleistung der Funktion eines Passivhauses

- *die aktuellen Produkte beherrschen*
- *gewerkeübergreifend arbeiten*



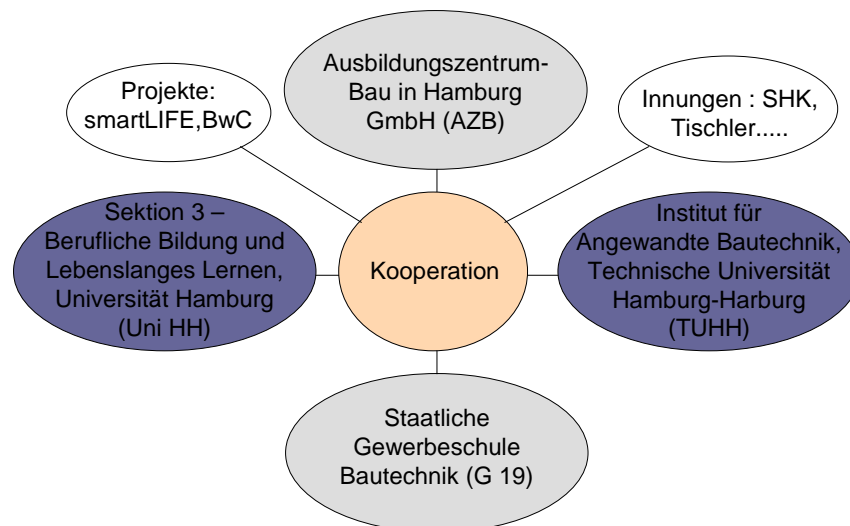
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- ...und wie befördern wir das ?



Lernortkooperation



Die Modelle im ZZB



Fotos: Britta Stein



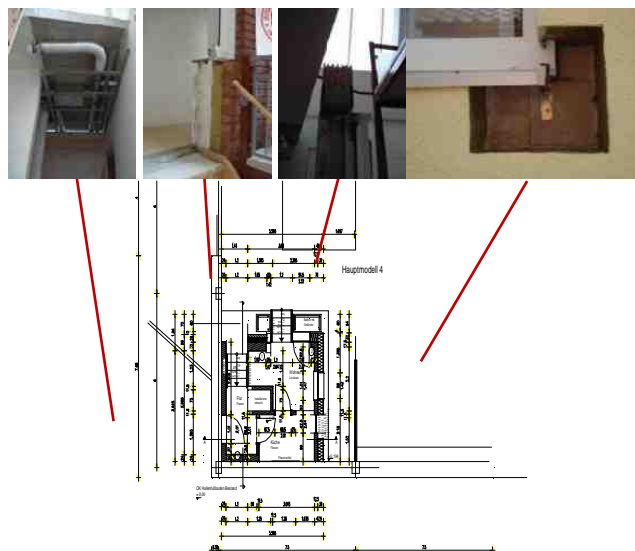
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ZzB – Modell eines Passivhauses



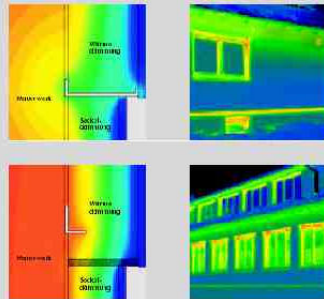
Drawing: Sonja Ziegenbein,
 Photos: Britta Stein



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ZzB - Passivhausdetails I



Photos: Britta Stein



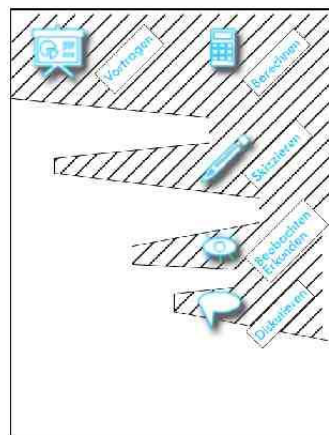
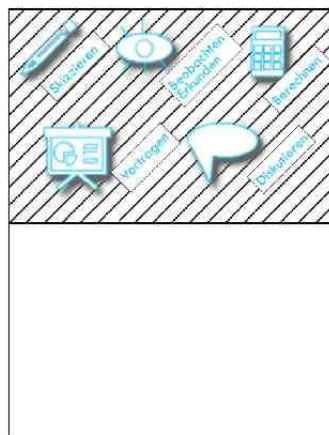
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Lernwerkstatt 2010: Vernetzung von Theorie + Praxis

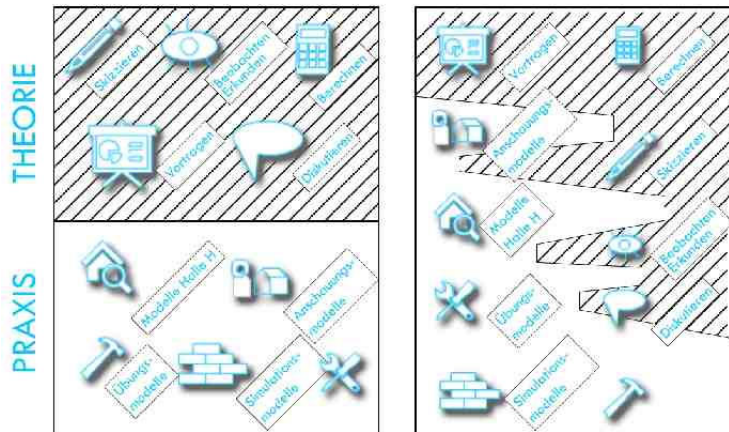


THEORIE
PRAXIS



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Mehr Qualität auf dem Bau



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Fazit

Planer und Ausführende müssen interagieren.

Planer müssen **empathisch** gegenüber den Ausführenden im **Maßstab 1:1 denken**

Die Ausführenden müssen **die aktuellen Produkte beherrschen** und **gewerkeübergreifend arbeiten**



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Vielen Dank für die Aufmerksamkeit!

www.zzb-hamburg.de
www.azb-hamburg.de
www.buildwithcare.eu



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