Choosing the RETROFIT measures

Choosing the RETROFIT measures

Energy Performance Certificate

SAP

3, David Street, Cwmdare, ABERDARE, CF44 8UE

Dwelling type:	Mid-terrace house	Reference number:	8684-7022-0470-8046-9922
Date of assessment:	26 February 2014	Type of assessment:	RdSAP, existing dwelling
Date of certificate:	03 March 2014	Total floor area:	55 m²

Use this document to:

- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

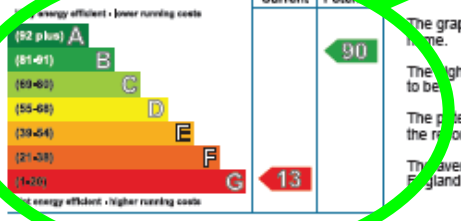
Estimated energy costs of dwelling for 3 years:	£ 5,454
Over 3 years you could save	£ 4,299

Estimated energy costs of this home

	Current costs	Potential costs	Potential future savings
Lighting	£ 213 over 3 years	£ 105 over 3 years	You could save £ 4,299 over 3 years
Heating	£ 3,906 over 3 years	£ 735 over 3 years	
Hot Water	£ 1,335 over 3 years	£ 315 over 3 years	
Totals	£ 5,454	£ 1,155	

These figures show how much the average household would spend in this property for heating, lighting and hot water. This excludes energy use for running appliances like TVs, computers and cooking, and any electricity generated by microgeneration.

Energy Efficiency Rating



The graph shows the current energy efficiency of your home.

The higher the rating the lower your fuel bills are likely to be.

The potential rating shows the effect of undertaking the recommendations on page 3.

The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

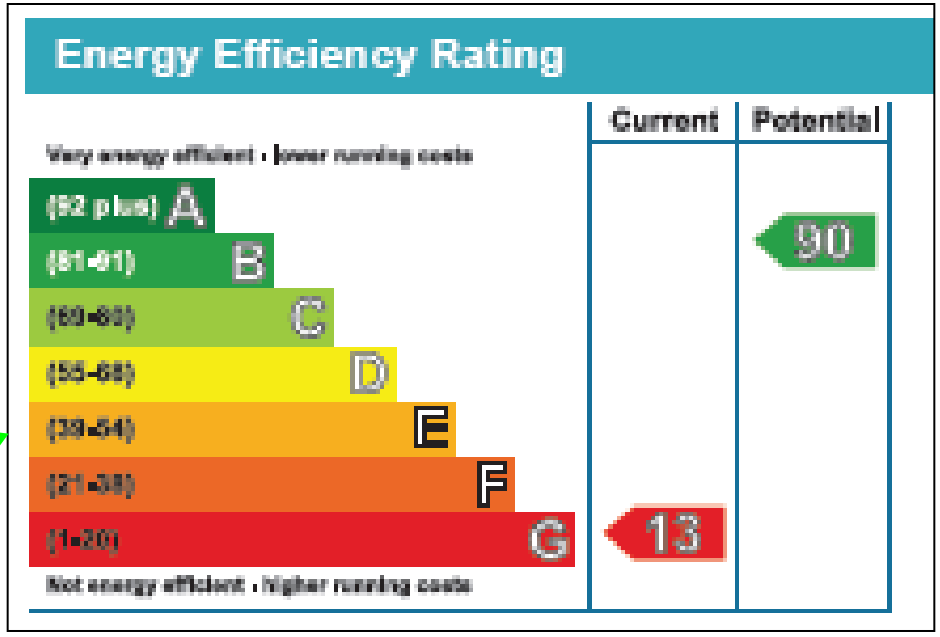
Top actions you can take to save money and make your home more efficient

Recommended measures	Indicative cost	Typical savings over 3 years	Available with Green Deal
1 Increase loft insulation to 270 mm	£100 - £350	£ 1,002	✓
2 Internal or external wall insulation	£4,000 - £14,000	£ 960	✓
3 Floor insulation	£800 - £1,200	£ 186	✓

See page 3 for a full list of recommendations for this property.

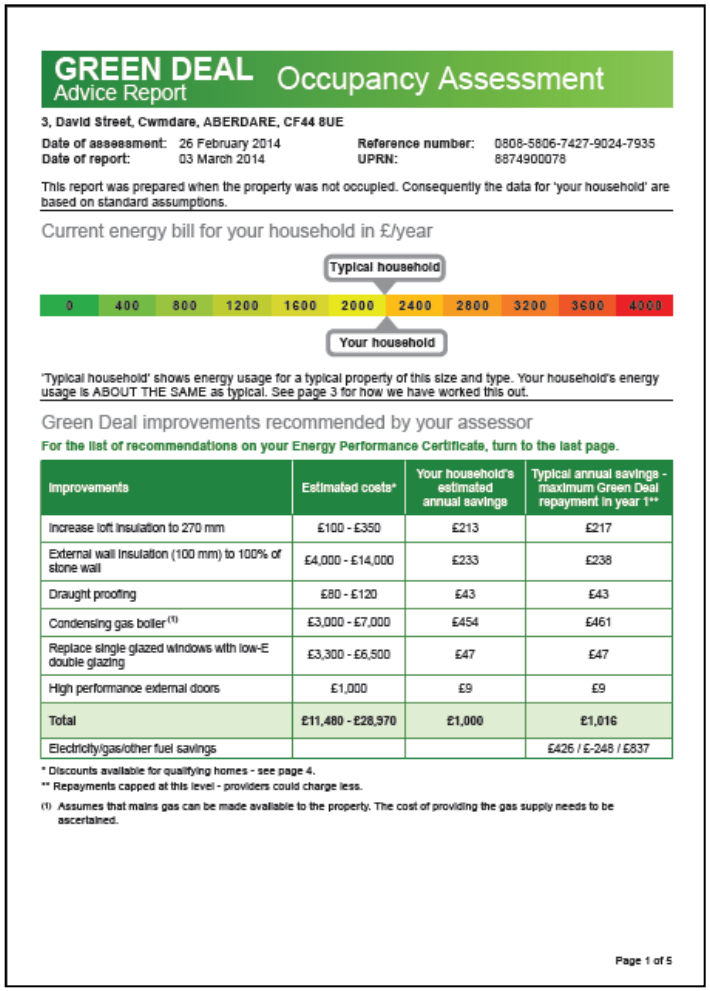
To find out more about the recommended measures and other actions you could take today to save money, visit www.direct.gov.uk/savingenergy or call 0300 123 1234 (standard national rate). The Green Deal may allow you to make your home warmer and cheaper to run at no up-front cost.

Page 1 of 5



EPC based on RdSAP software with assumed U-Values provides a SAP rating of 13 points – within band 'G'

Choosing the RETROFIT measures



GREEN DEAL Advice Report — Occupancy Assessment

3, David Street, Cwmdare, ABERDARE, CF44 8UE

Date of assessment: 26 February 2014
Date of report: 03 March 2014
Reference number: 0808-5806-7427-9024-7935
UPRN: 8874900078

This report was prepared when the property was not occupied. Consequently the data for 'your household' are based on standard assumptions.

Current energy bill for your household in £/year

Typical household

0 | 400 | 800 | 1200 | 1600 | 2000 | 2400 | 2800 | 3200 | 3600 | 4000

Your household

'Typical household' shows energy usage for a typical property of this size and type. Your household's energy usage is ABOUT THE SAME as typical. See page 3 for how we have worked this out.

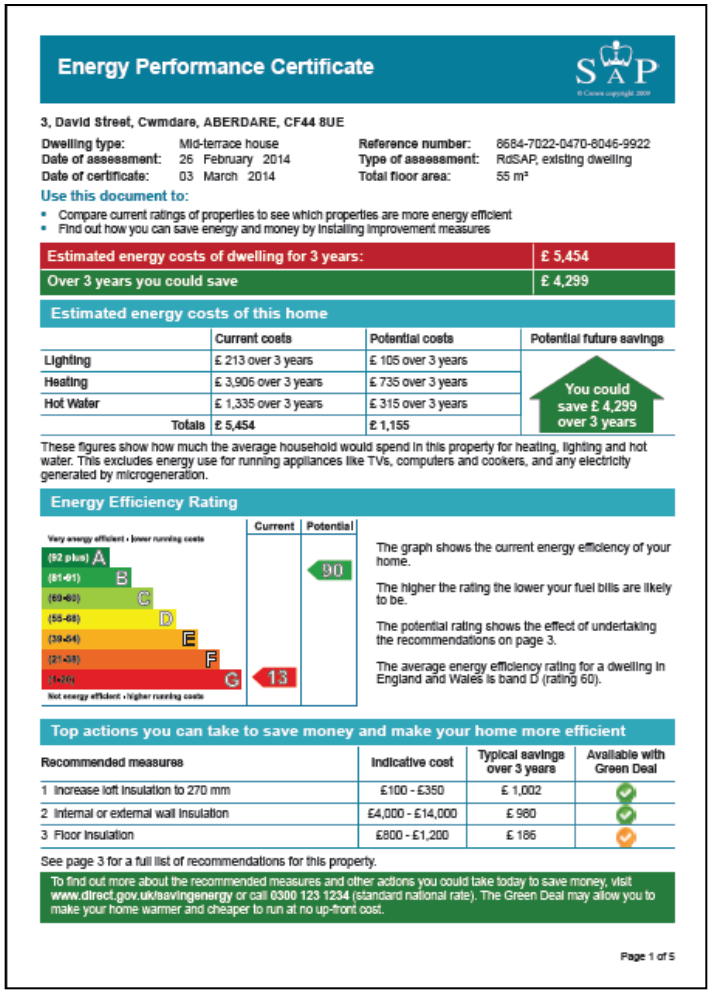
Green Deal improvements recommended by your assessor

For the list of recommendations on your Energy Performance Certificate, turn to the last page.

Improvements	Estimated costs*	Your household's estimated annual savings	Typical annual savings - maximum Green Deal repayment in year 1**
Increase loft insulation to 270 mm	£100 - £350	£213	£217
External wall insulation (100 mm) to 100% of stone wall	£4,000 - £14,000	£233	£238
Draught proofing	£80 - £120	£43	£43
Condensing gas boiler (1)	£3,000 - £7,000	£454	£461
Replace single glazed windows with low-E double glazing	£3,300 - £6,500	£47	£47
High performance external doors	£1,000	£9	£9
Total	£11,480 - £28,970	£1,000	£1,016
Electricity/gas/other fuel savings			£426 / £-248 / £837

* Discounts available for qualifying homes - see page 4.
** Repayments capped at this level - providers could charge less.
(1) Assumes that mains gas can be made available to the property. The cost of providing the gas supply needs to be ascertained.

Page 1 of 5



Energy Performance Certificate — SAP

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Energy Efficiency Rating

Current | Potential

Very energy efficient - lower running costs
(92 plus) A
(81-91) B
(69-80) C
(55-68) D
(39-54) E
(21-38) F
(1-20) G
Not energy efficient - higher running costs

Current: 13
Potential: 90

The graph shows the current energy efficiency of your home.

The higher the rating the lower your fuel bills are likely to be.

The potential rating shows the effect of undertaking the recommendations on page 3.

The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

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Recommended measures	Indicative cost	Typical savings over 3 years	Available with Green Deal
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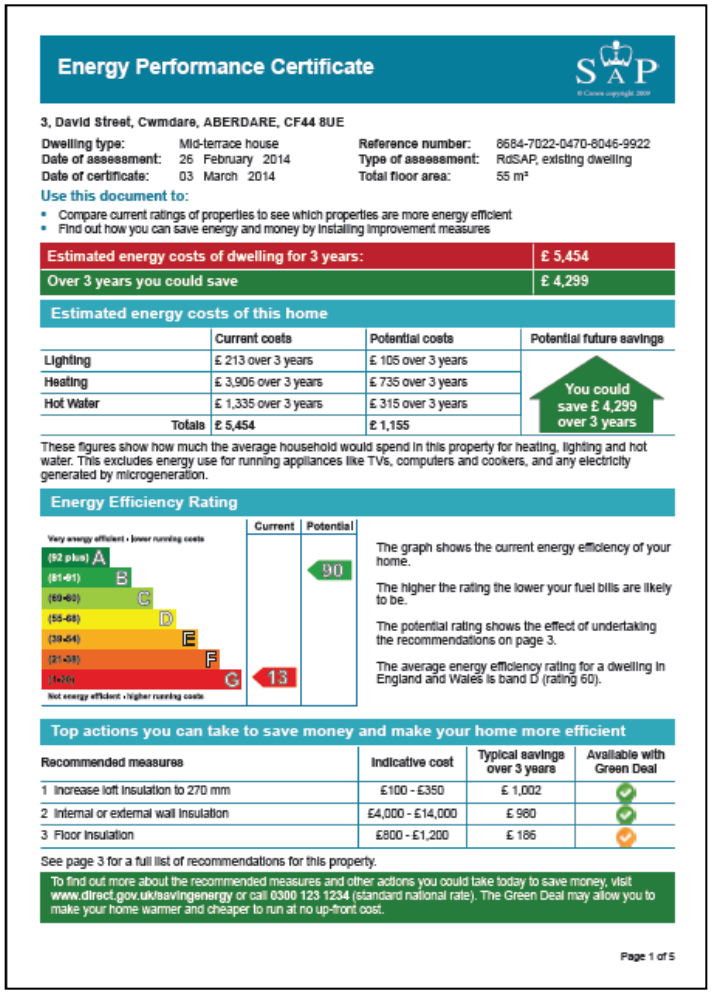
Page 1 of 5

Green Deal Assessment & EPC

Choosing the RETROFIT measures



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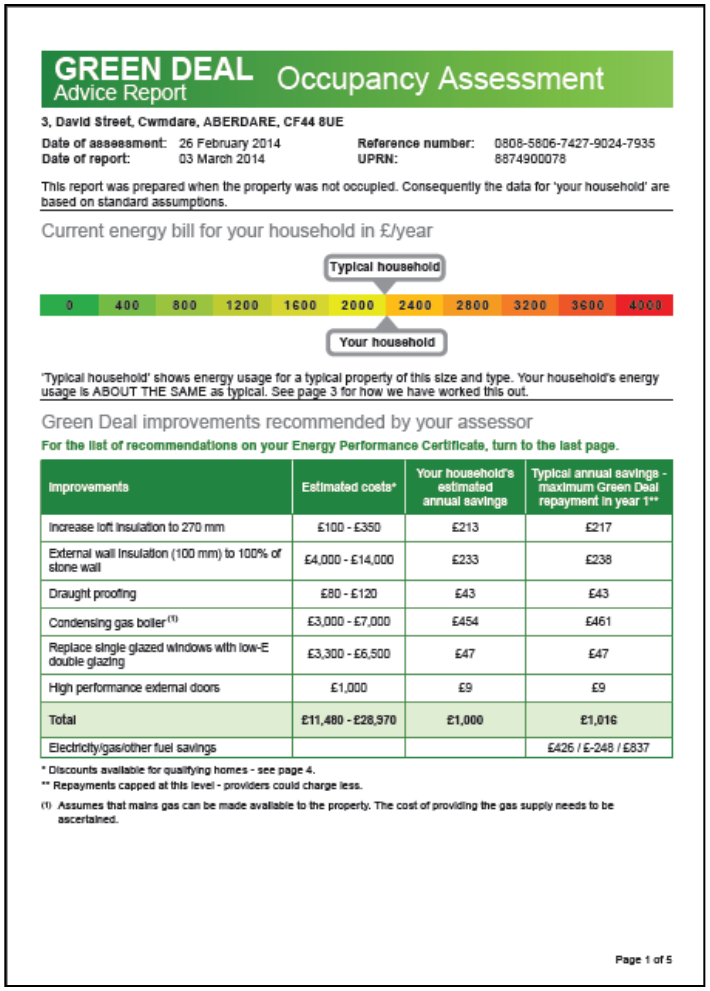
Page 1 of 5

1. Lowest Band at G but could achieve Band B, but:
2. Are all recommended ‘measures’ suitable or achievable?
3. Doesn’t take into account condition of the building and the impact of maintenance.
4. Base line data on performance is inaccurate so percentage of real improvement is impossible to ascertain.

Choosing the RETROFIT measures



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1. Based on inaccurate EPC with potentially inaccurate predictions on improved energy performance.
2. Unreliable payback periods.
3. Unreliable £ savings.
4. Doesn't pick up other measures / works which would save energy and '£'s.

Choosing the RETROFIT measures

GREEN DEAL Occupancy Assessment

Improvements recommended on the EPC

Improvements	Estimated costs	Your household's estimated annual savings	Expected Green Deal repayment in year 1	Green Deal finance
Increase loft insulation to 270 mm	£100 - £350	£213	£217	✓
Solar photovoltaic panels, 2.5 kWp	£9,000 - £14,000	£258	£258	✓
Wind turbine	£1,500 - £4,000	£20	£20	✓
Internal or external wall insulation	£4,000 - £14,000	£240	£245	✓
Floor insulation	£800 - £1,200	£52	£53	✓
Draught proofing	£80 - £120	£43	£44	✓
Low energy lighting for all fixed outlets	£40	£24	£22	
Wood pellet stove with boiler and radiators	£7,000 - £13,000	£195	£184	✓
Solar water heating	£4,000 - £6,000	£93	£90	✓
Replace single glazed windows with low-E double glazing	£3,300 - £6,500	£95	£103	✓
High performance external doors	£1,000	£17	£18	✓
Total	**£30,820 - £60,210**	**£1,250**	**£1,254**	

Choosing the RETROFIT measures

Measure	Lowest cost	Highest cost	Estimated savings	Payback on lowest cost	Payback on highest cost
IWI/ EWI	£4,000	£14,000	£240	16.7 years	58.3 years
Draught proofing	£80	£120	£43	1.9 years	2.8 years
Double glazing	£3,300	£6,500	£103	32 years	63.1 years

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1. EWI / IWI – could be beneficial, if aesthetics are understood and there is sufficient understanding about technicalities and work is properly undertaken.

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2. Draught proofing - very beneficial.

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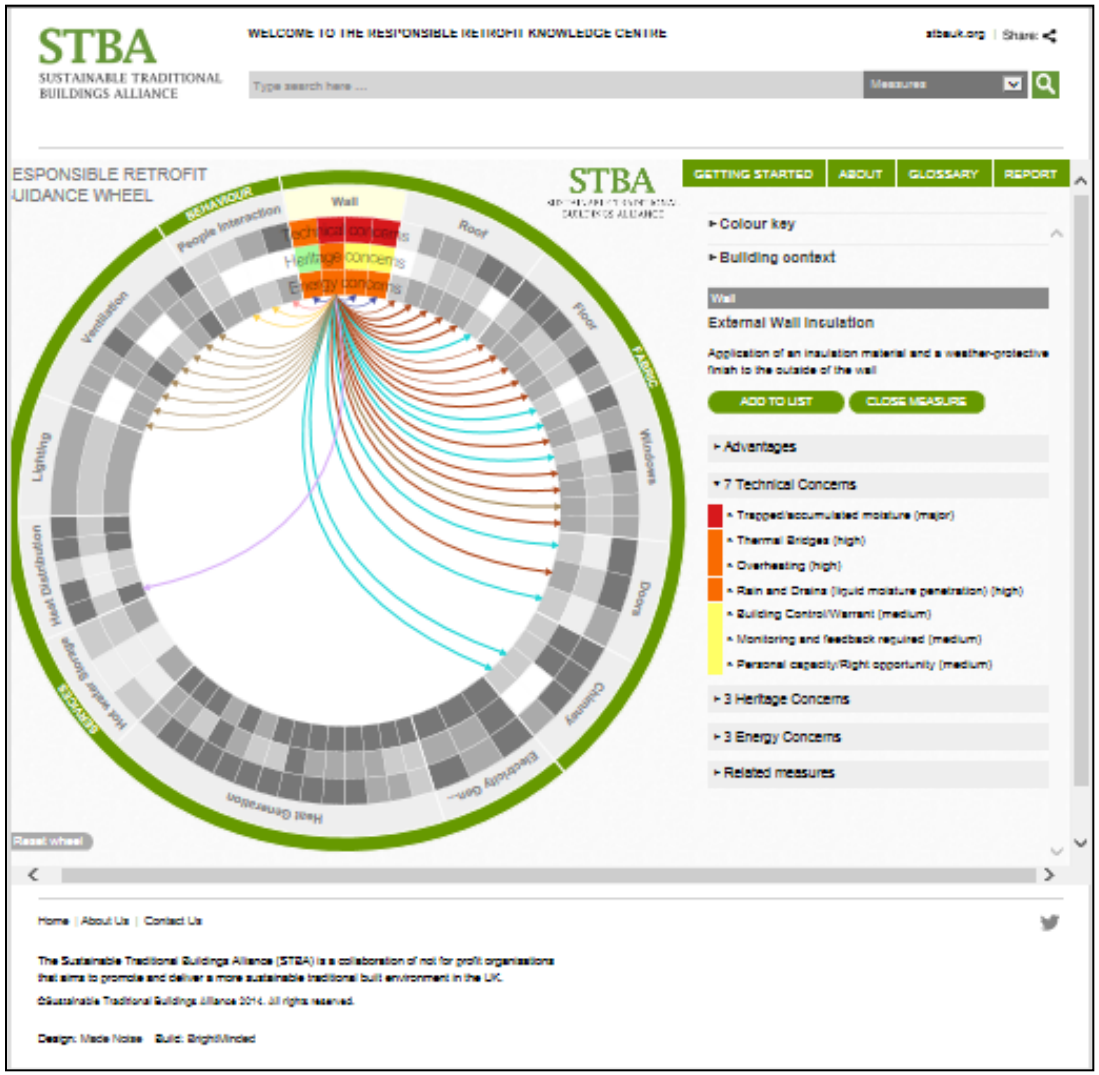
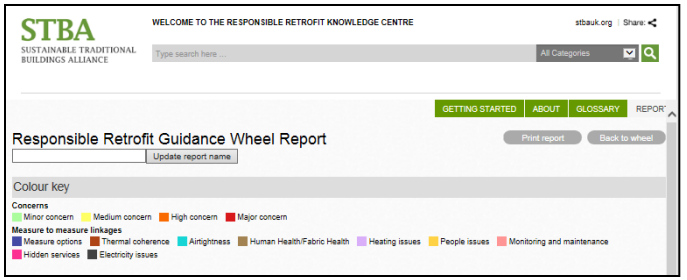
1. EWI / IWI – could be beneficial, if aesthetics are understood and there is sufficient understanding about technicalities and work is properly undertaken.
2. Draught proofing - very beneficial.
3. New double glazed windows – consider alternatives.

Choosing the RETROFIT measures





STBA Retrofit Guidance Tool

Choosing the RETROFIT measures

STBA Retrofit Guidance Tool

An aid to decision making and a way of learning about traditional building retrofit

- Single interface
- Explain technical issues to a wider public
- Highlight the risks of individual measures
- Show the links to other aspects of buildings
- Signpost relevant expert research

http://responsible-retrofit.org/wheel/ (freely available)

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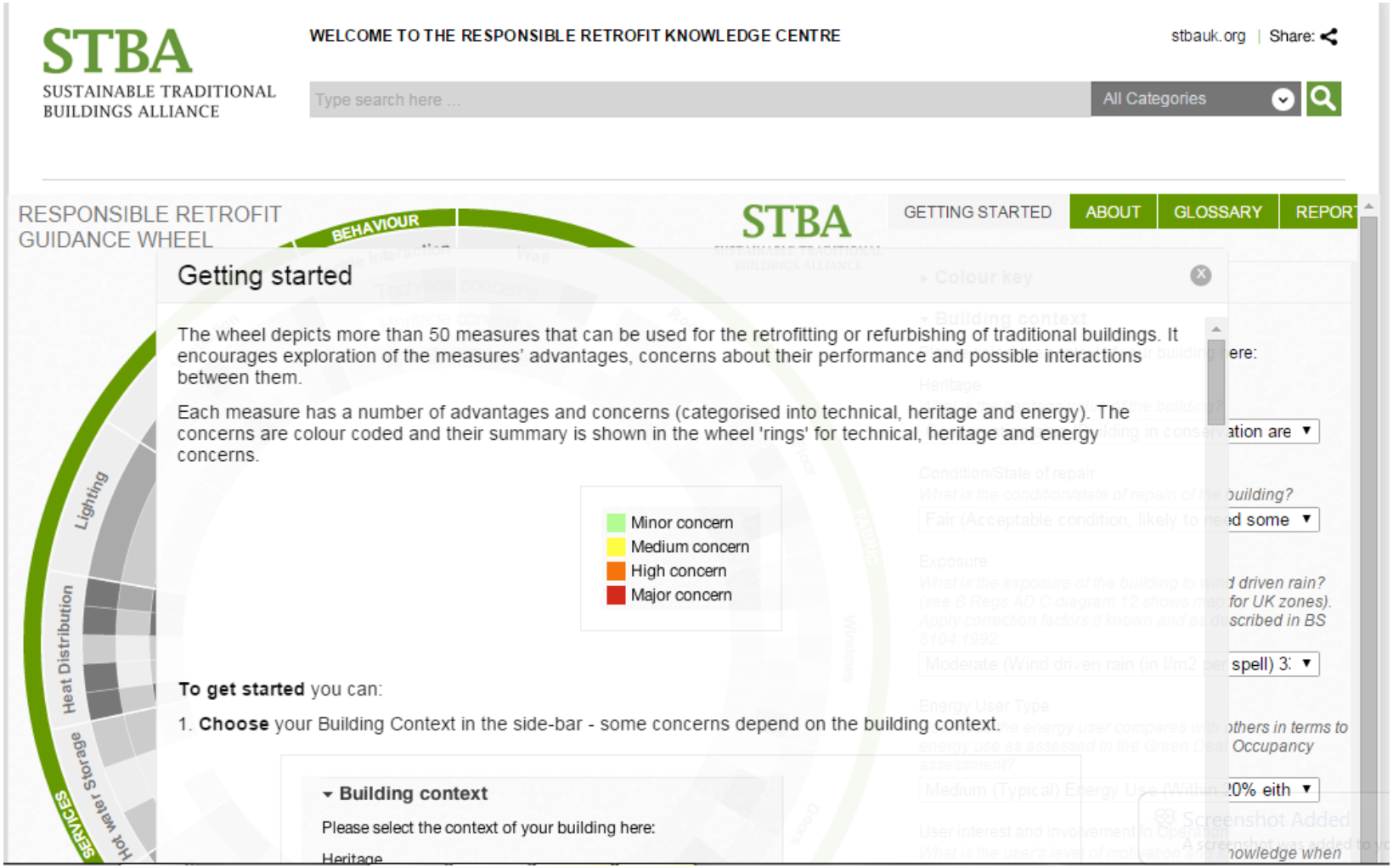
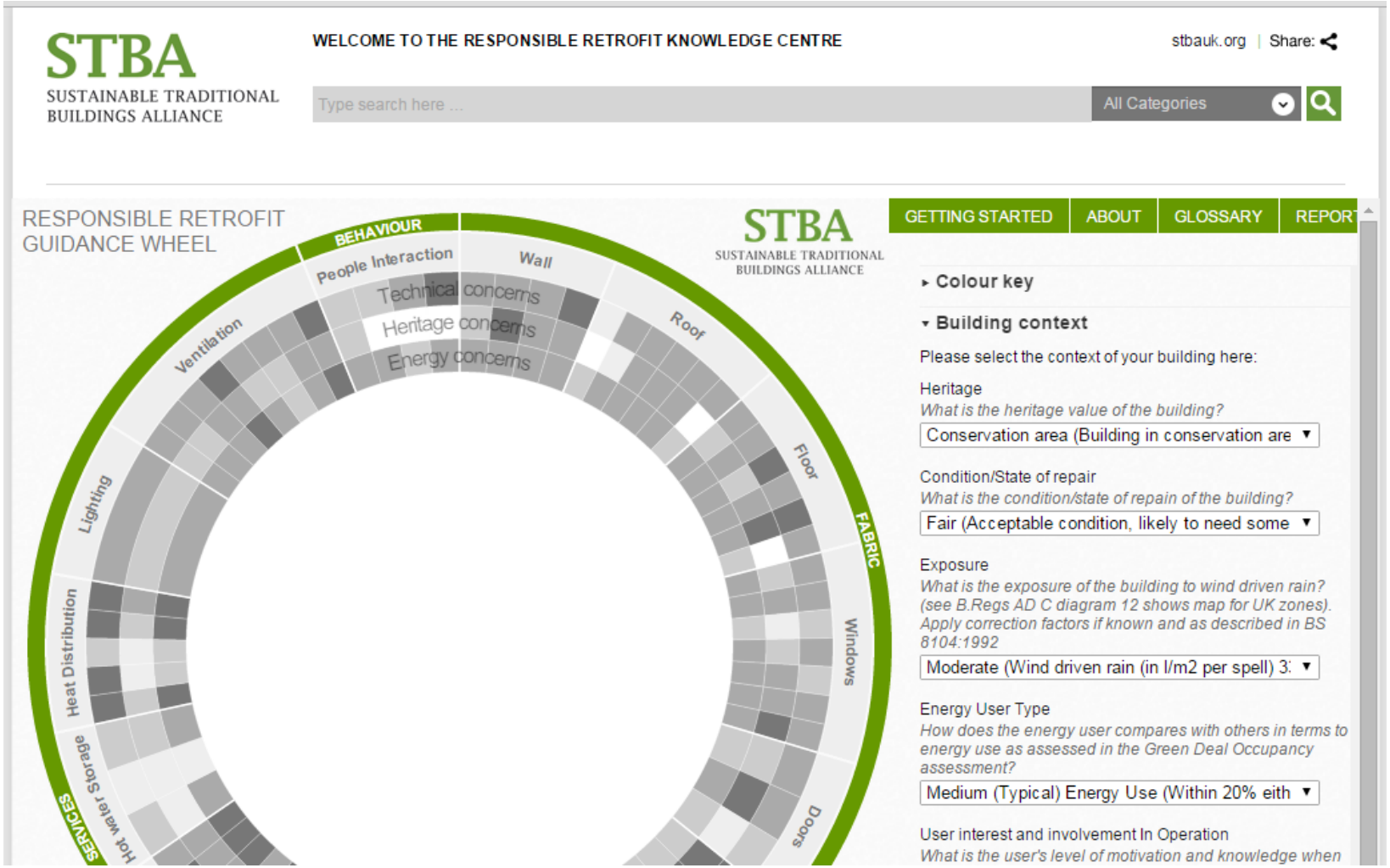
BUT no mention of BS 7913 and 'significance'

Choosing the RETROFIT measures



Stage 1 - Context setting

Choosing the RETROFIT measures



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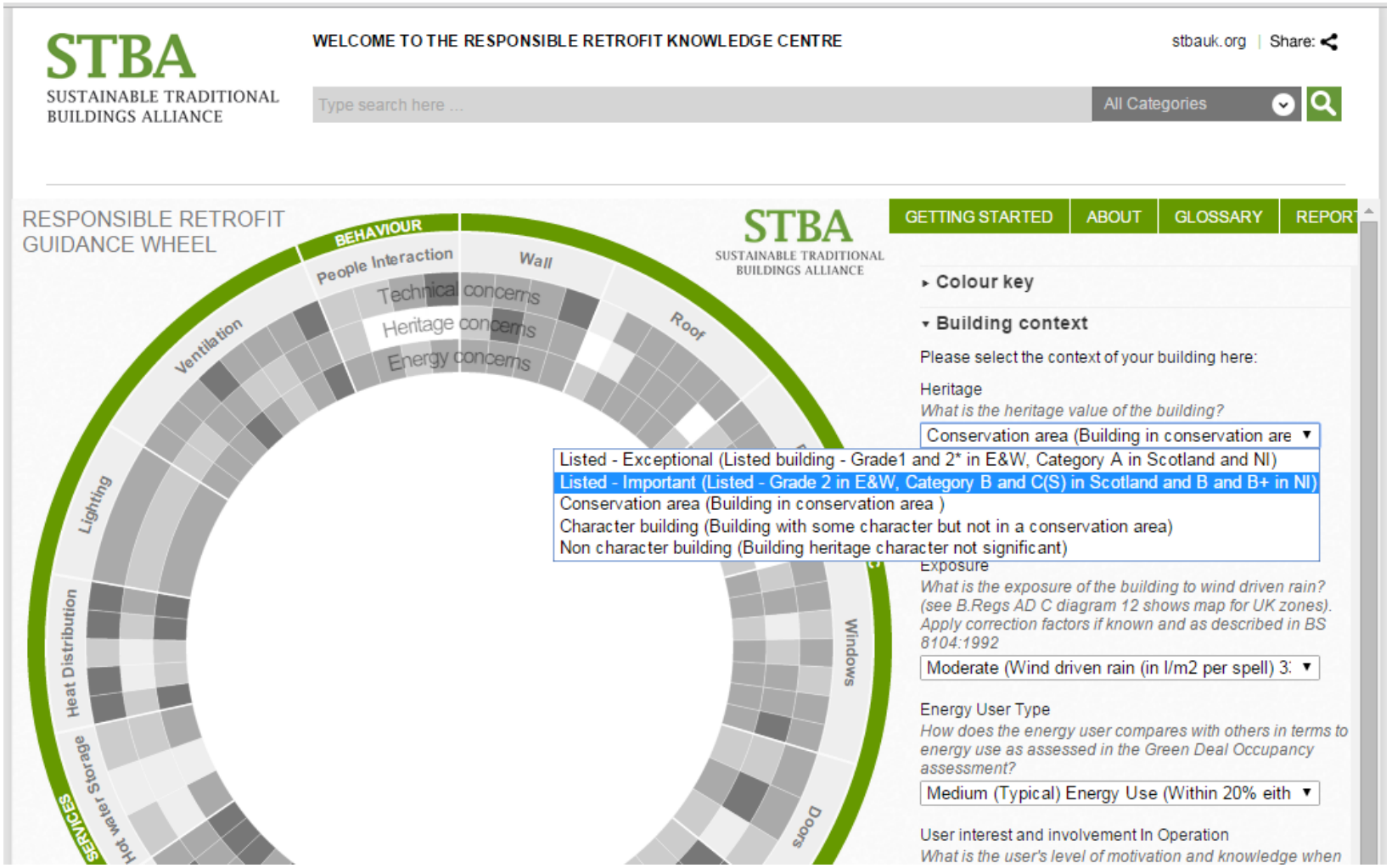

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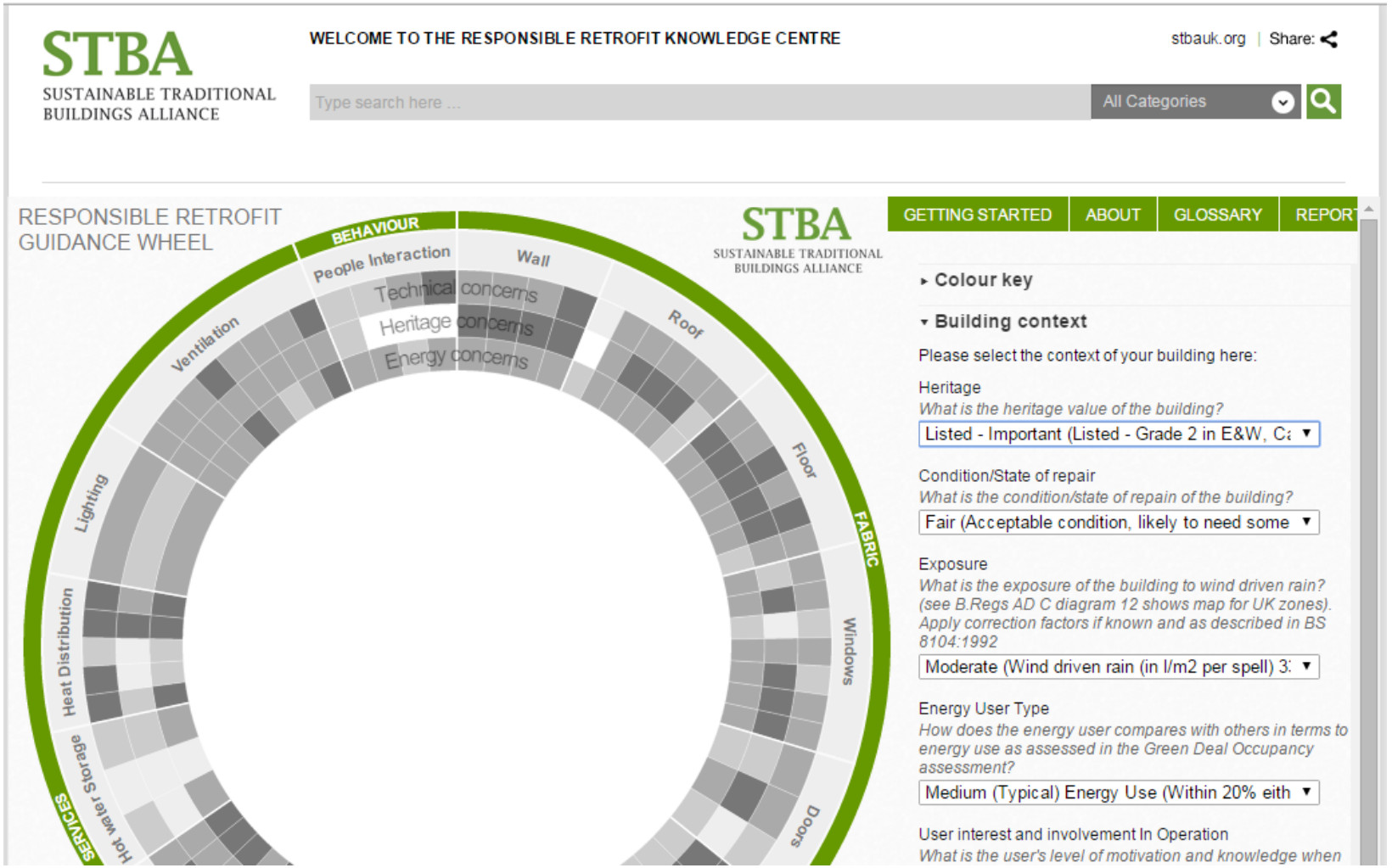

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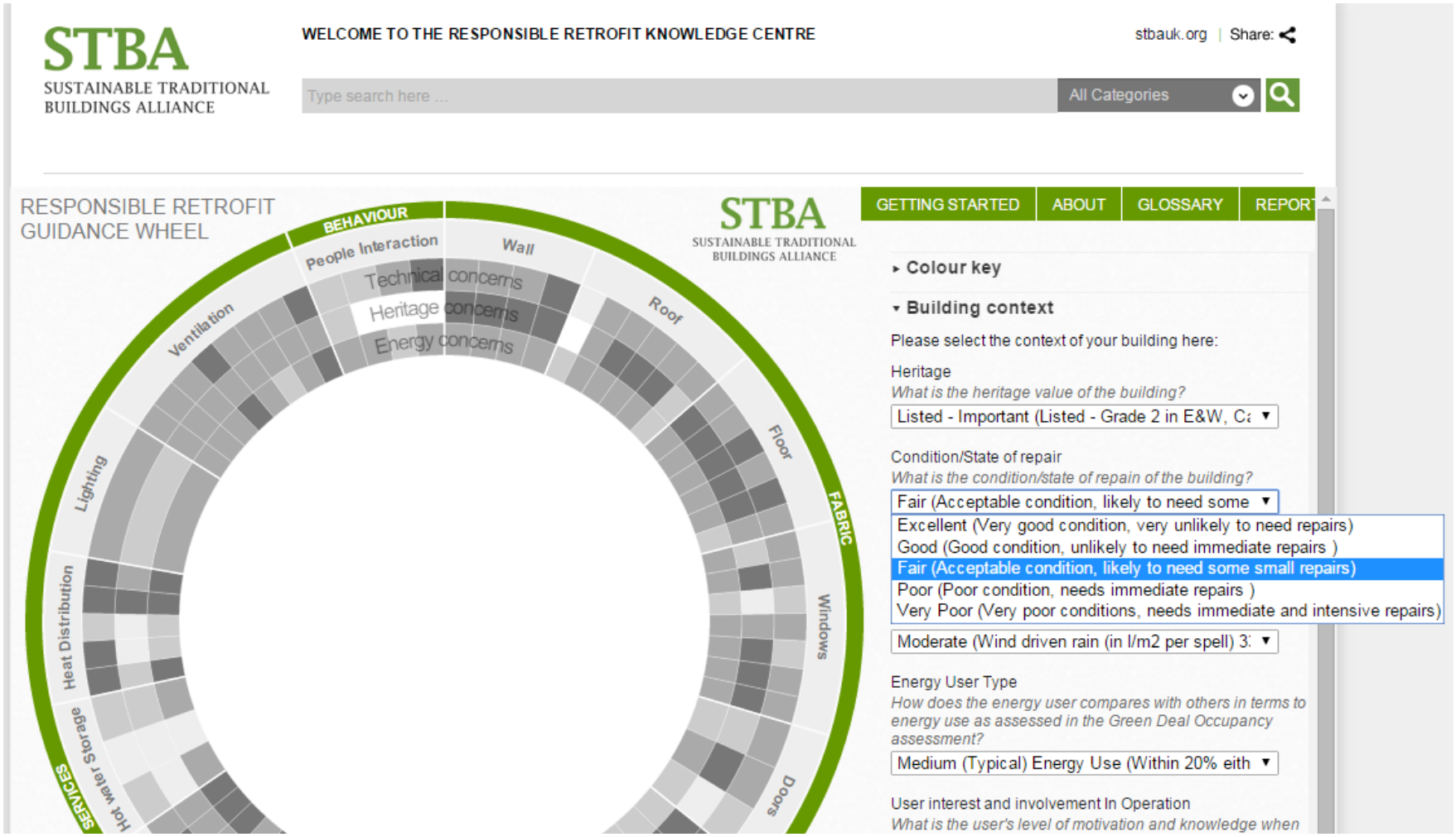

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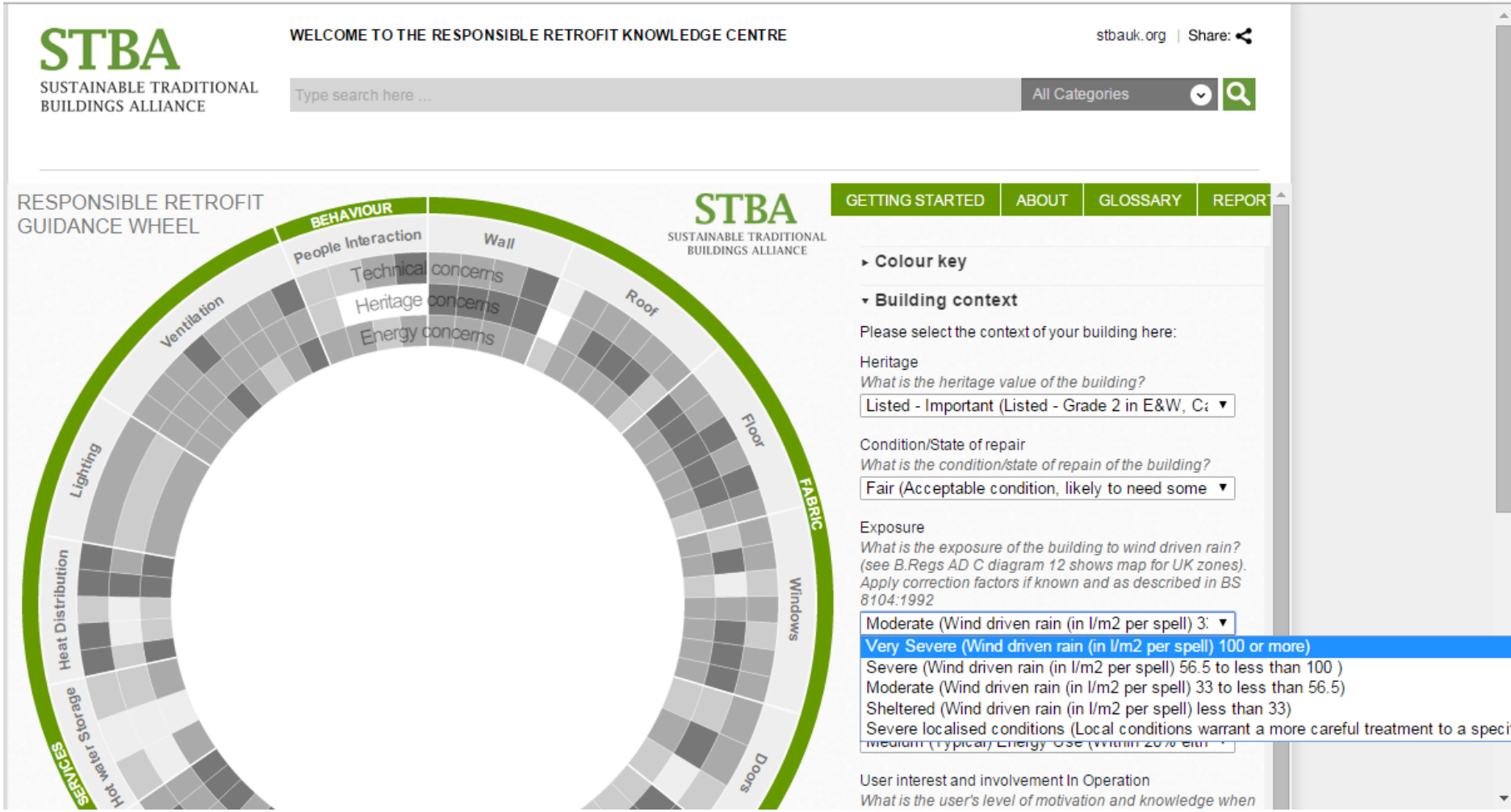

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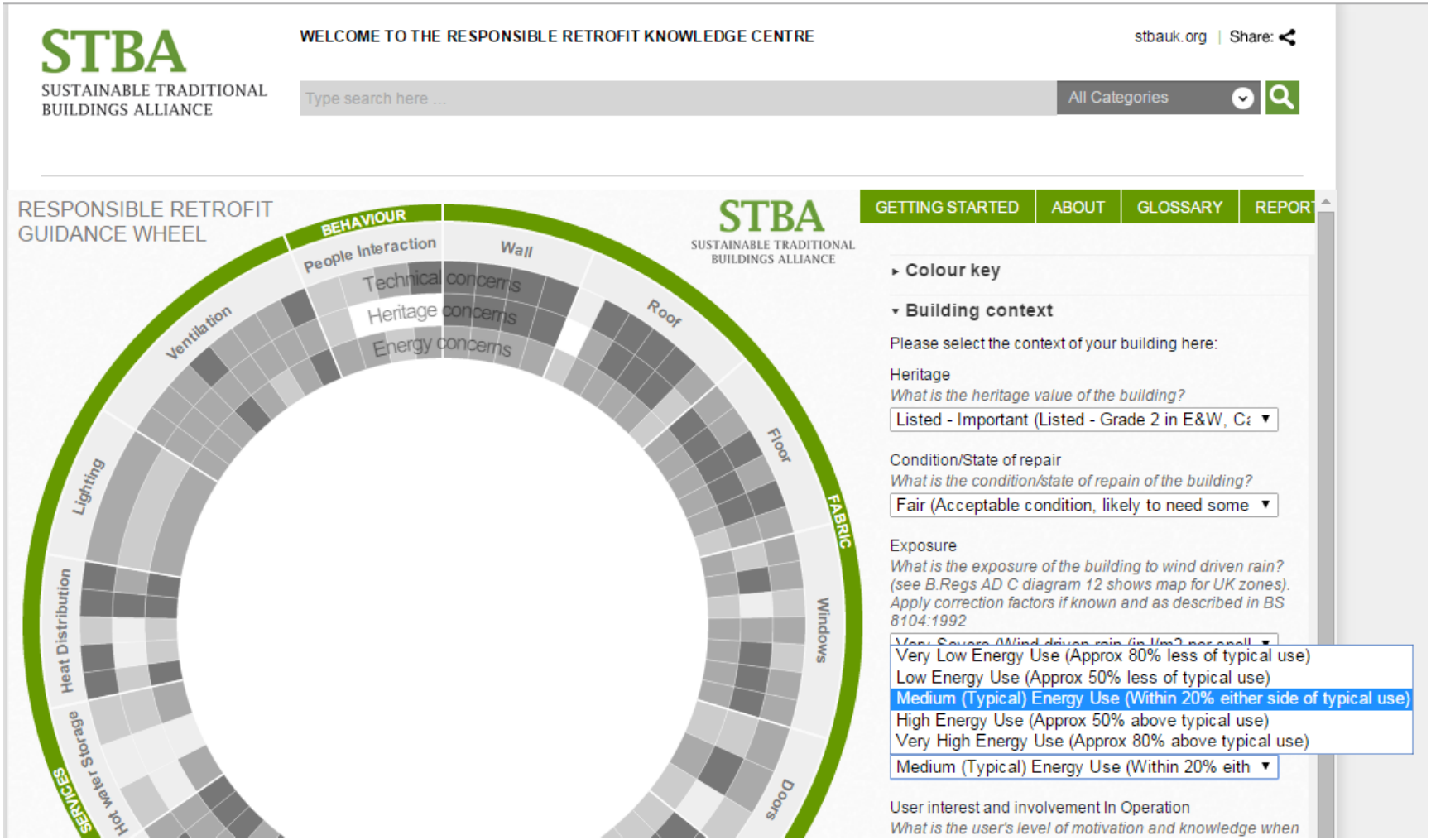

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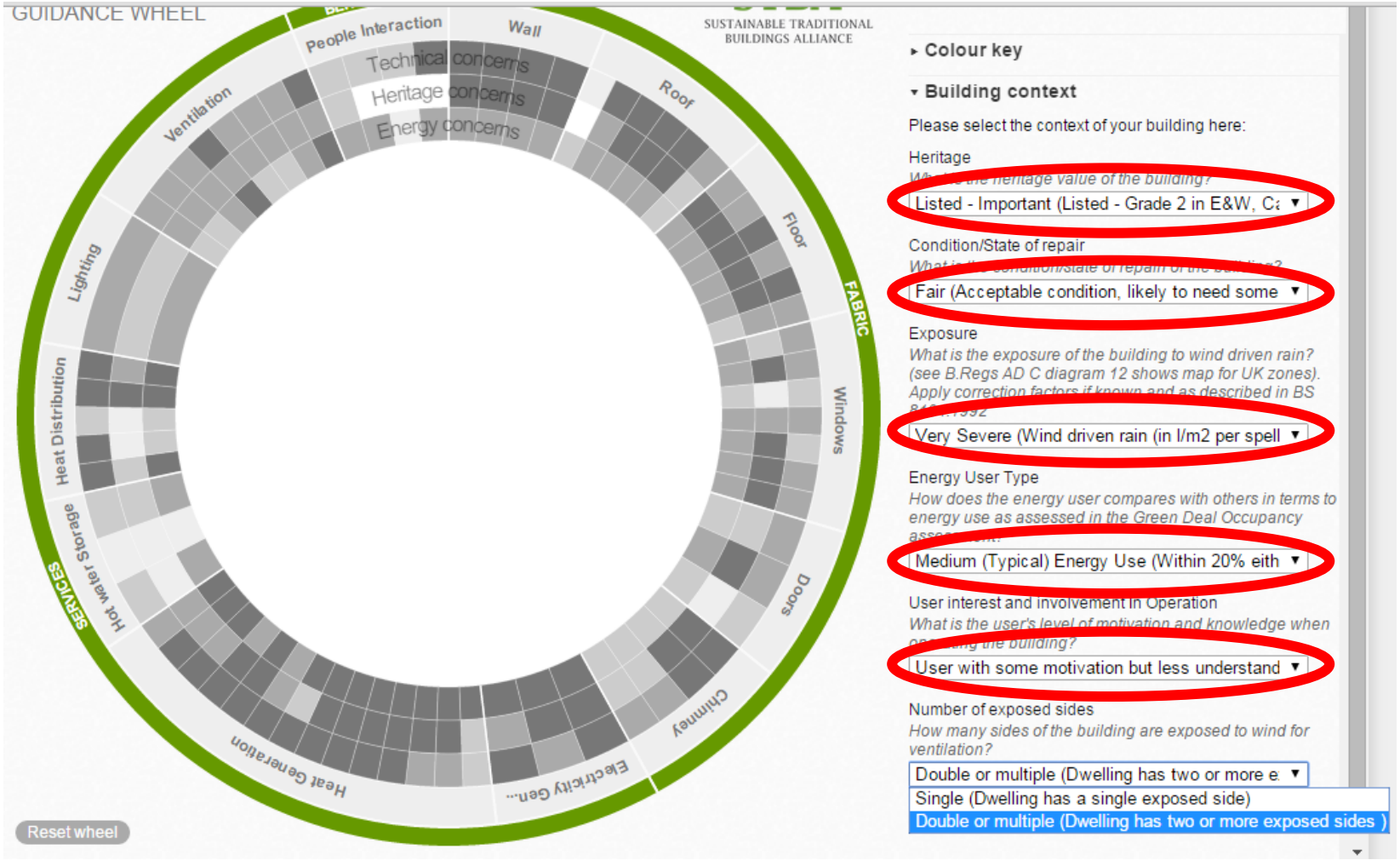

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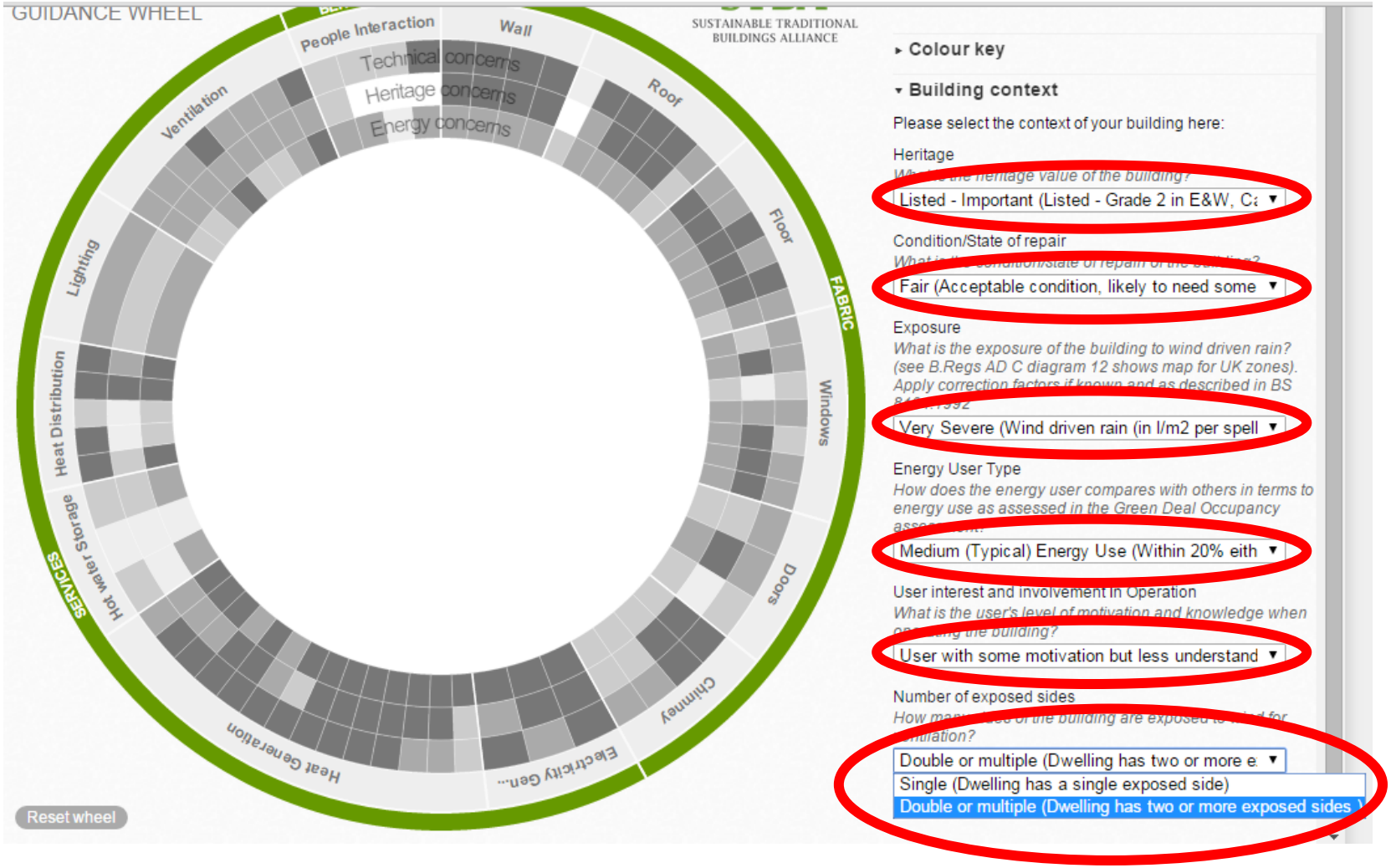

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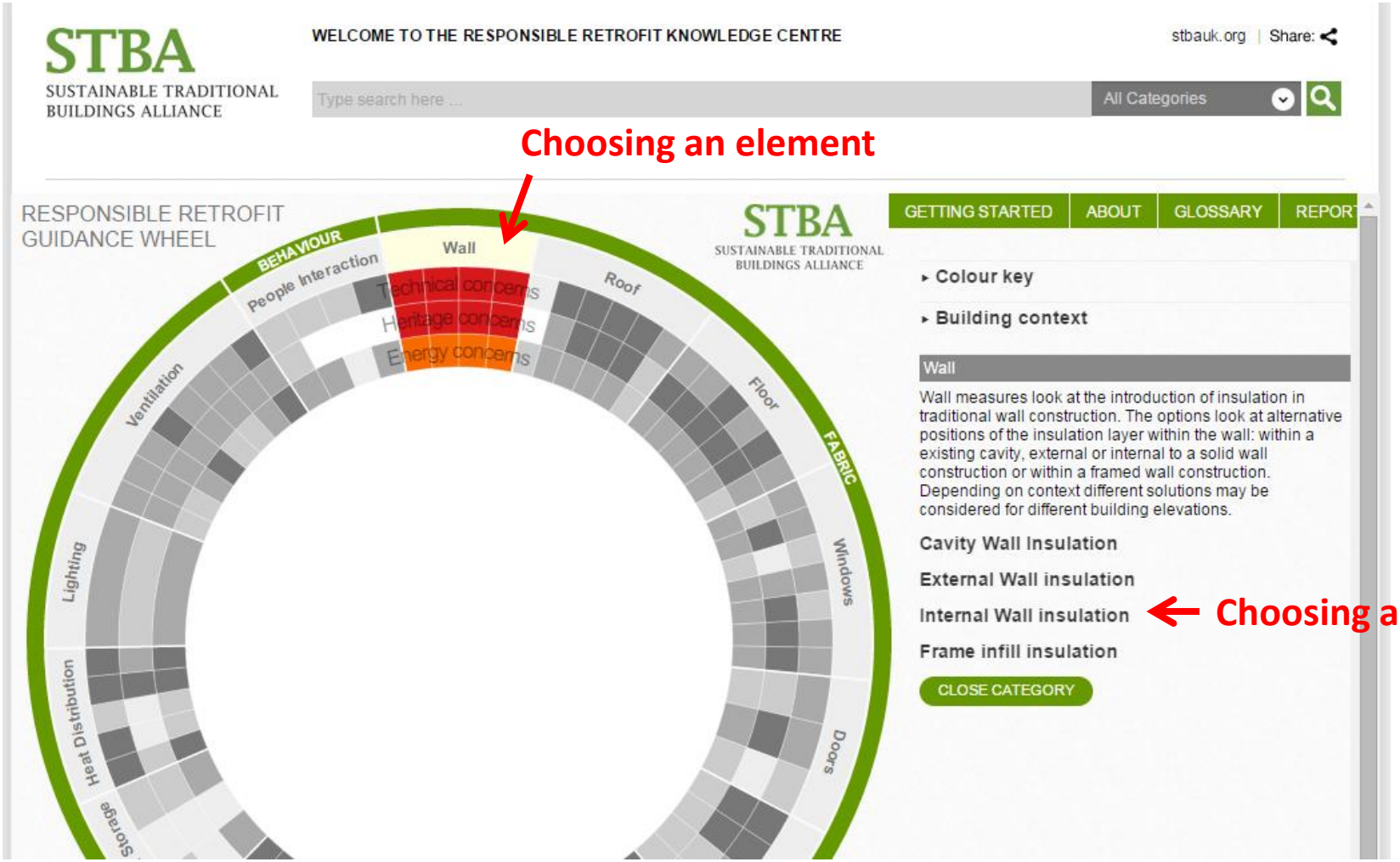

Stage 2 – Explore and Select Measures

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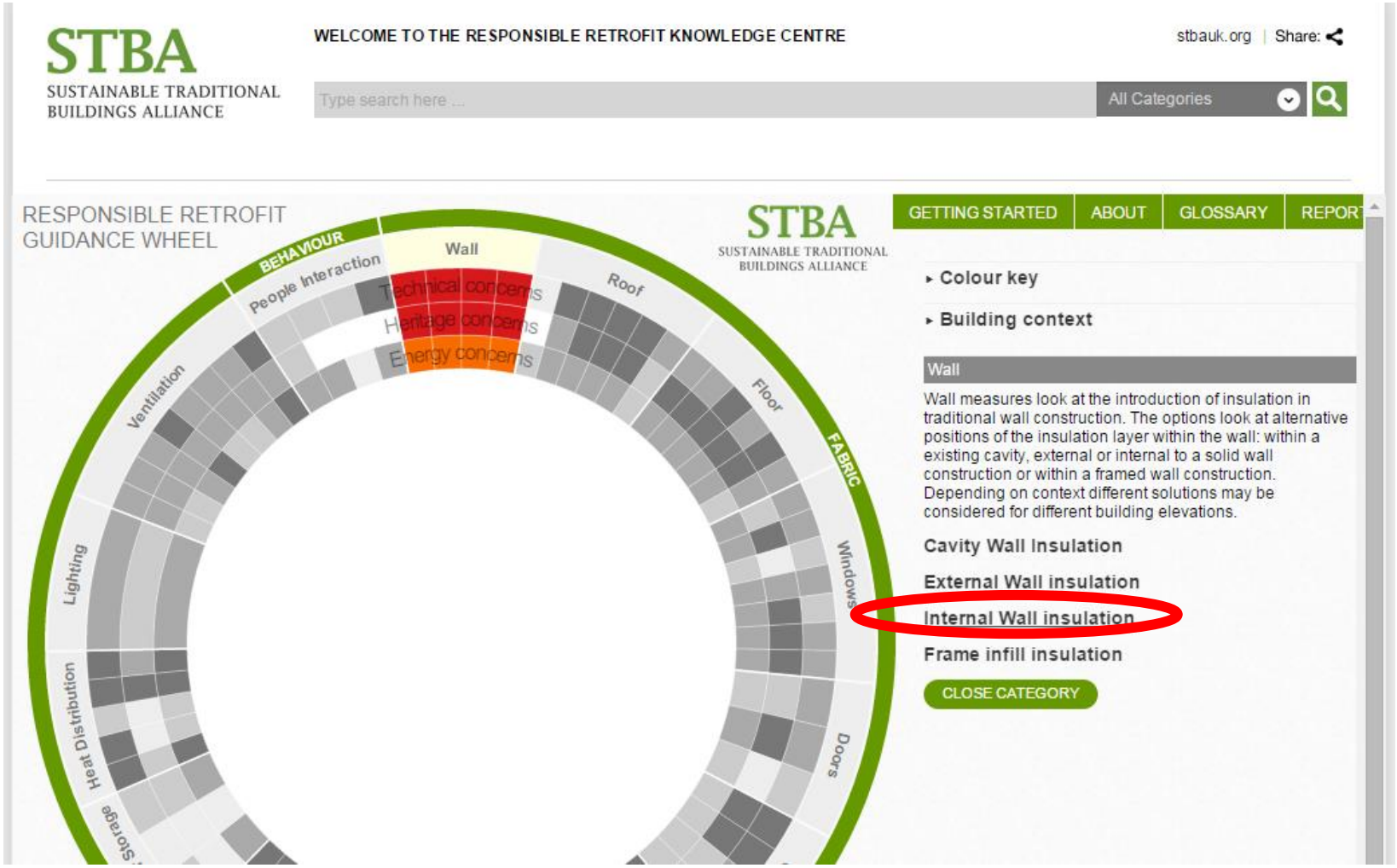

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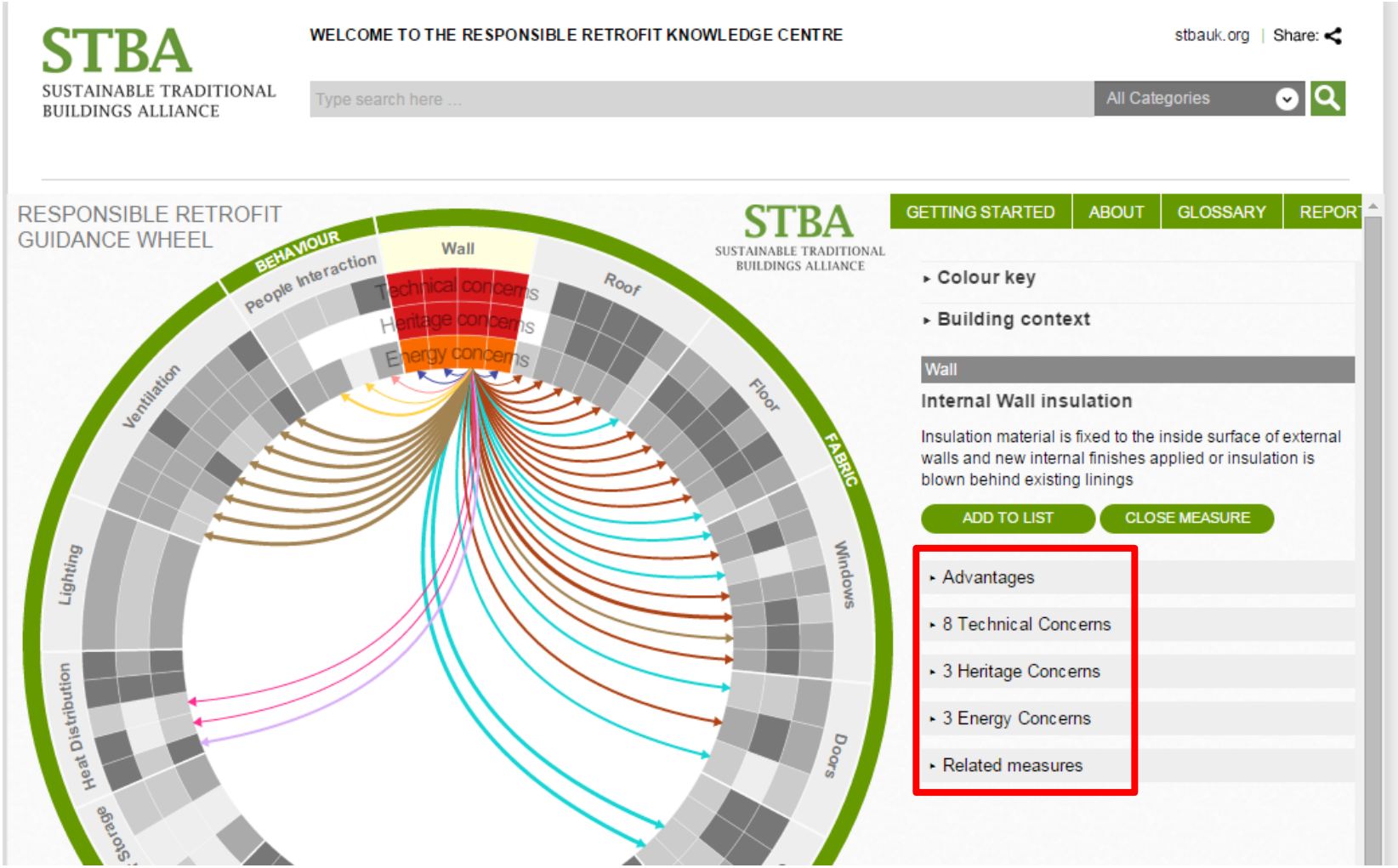

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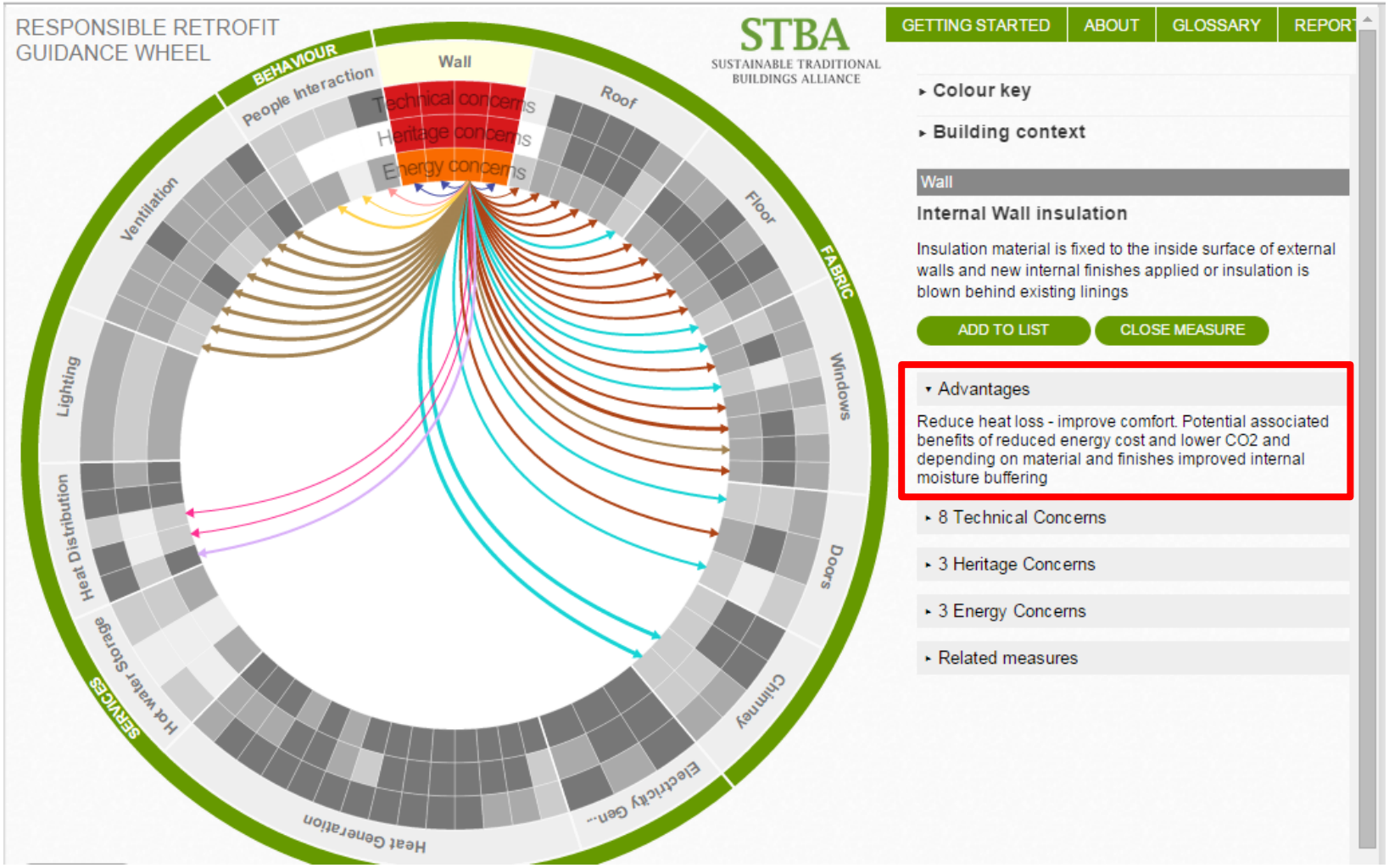

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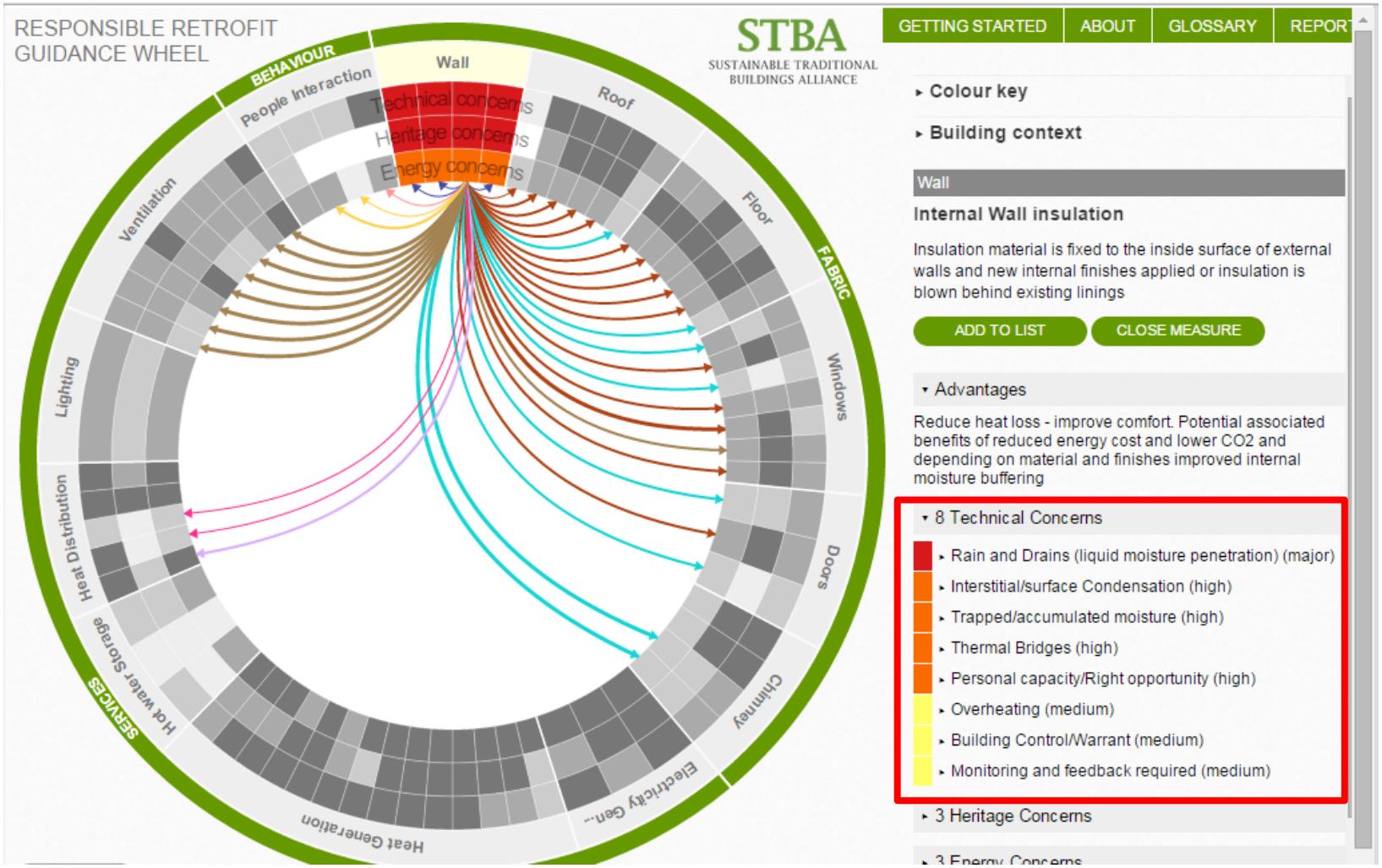

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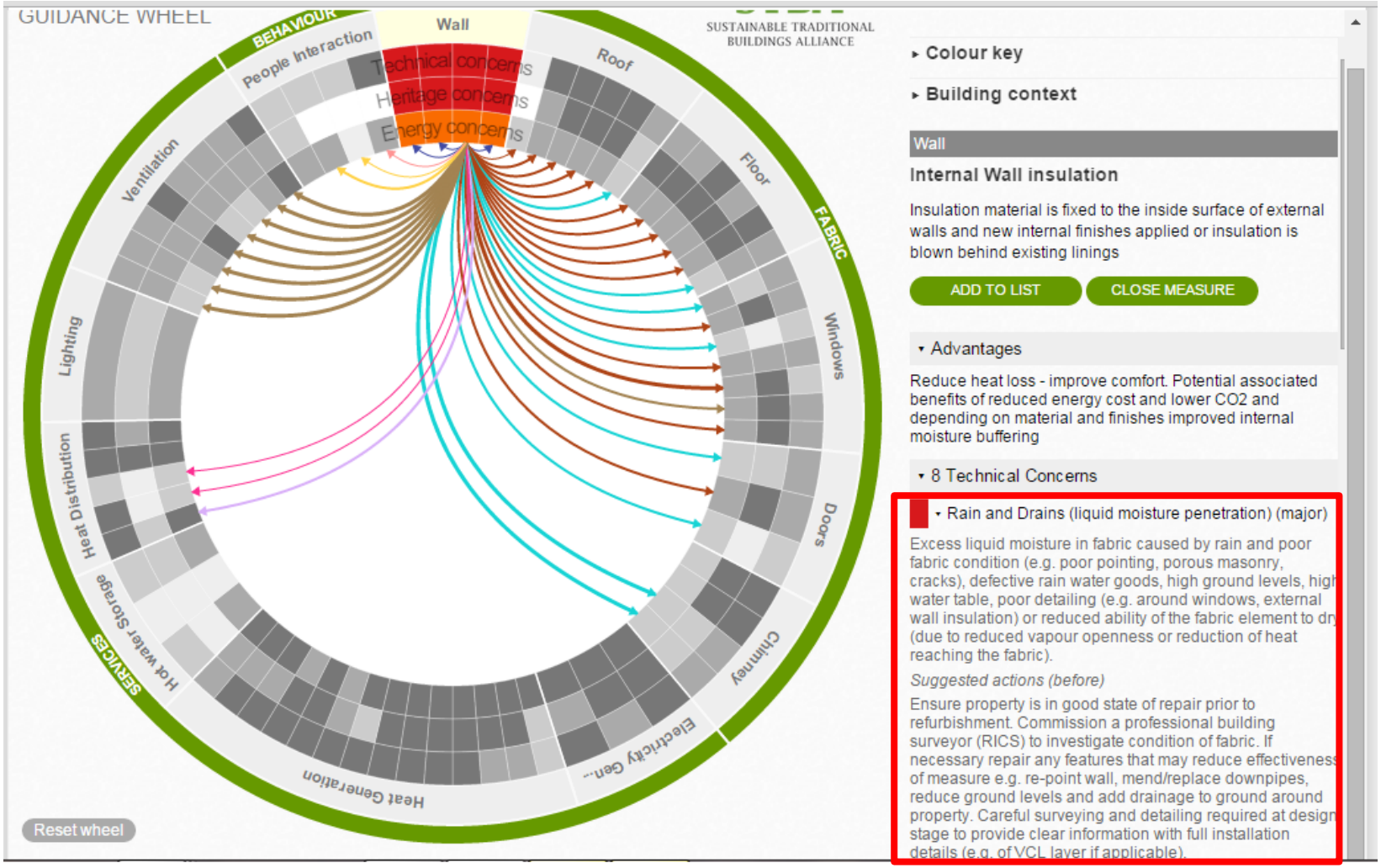

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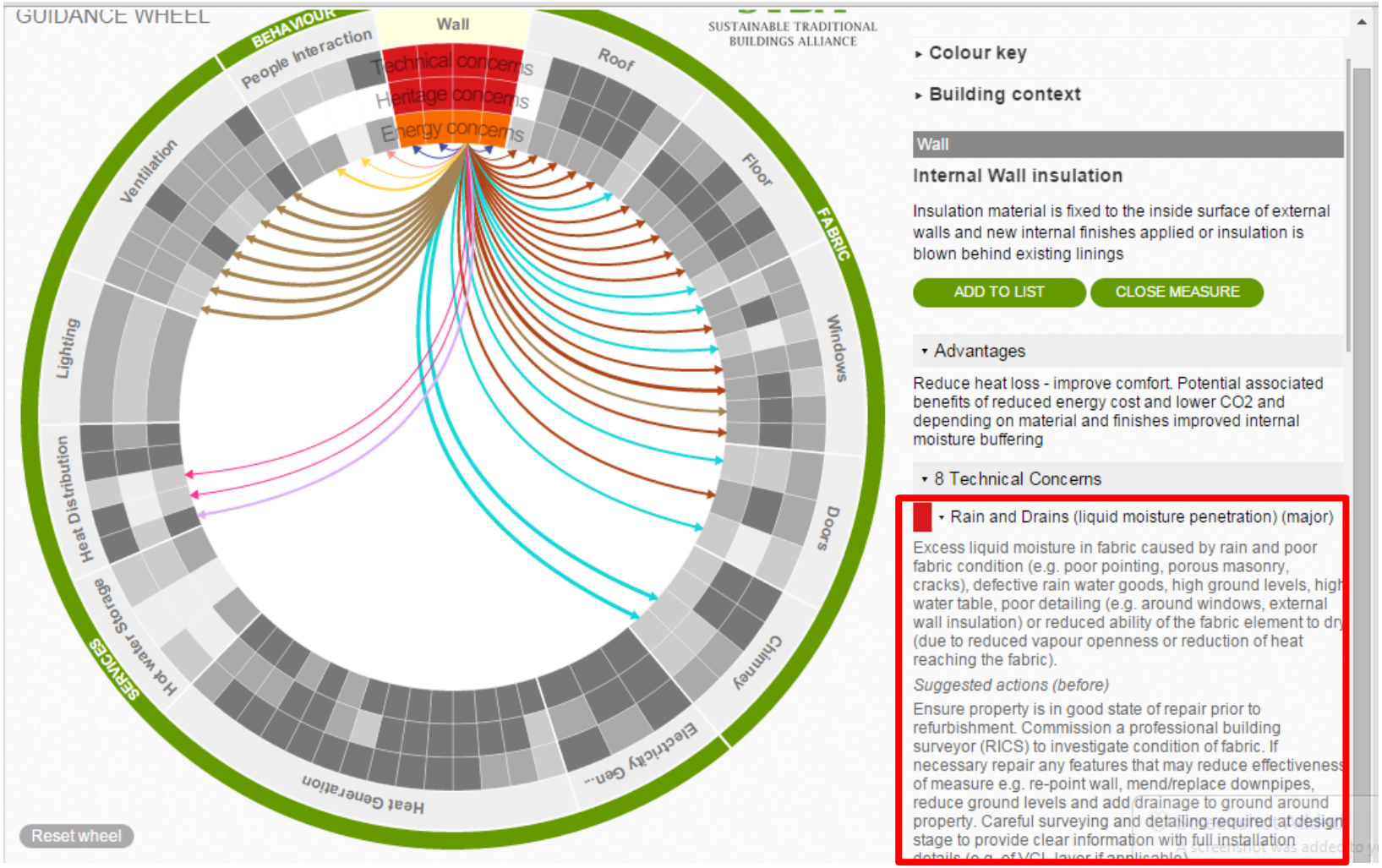

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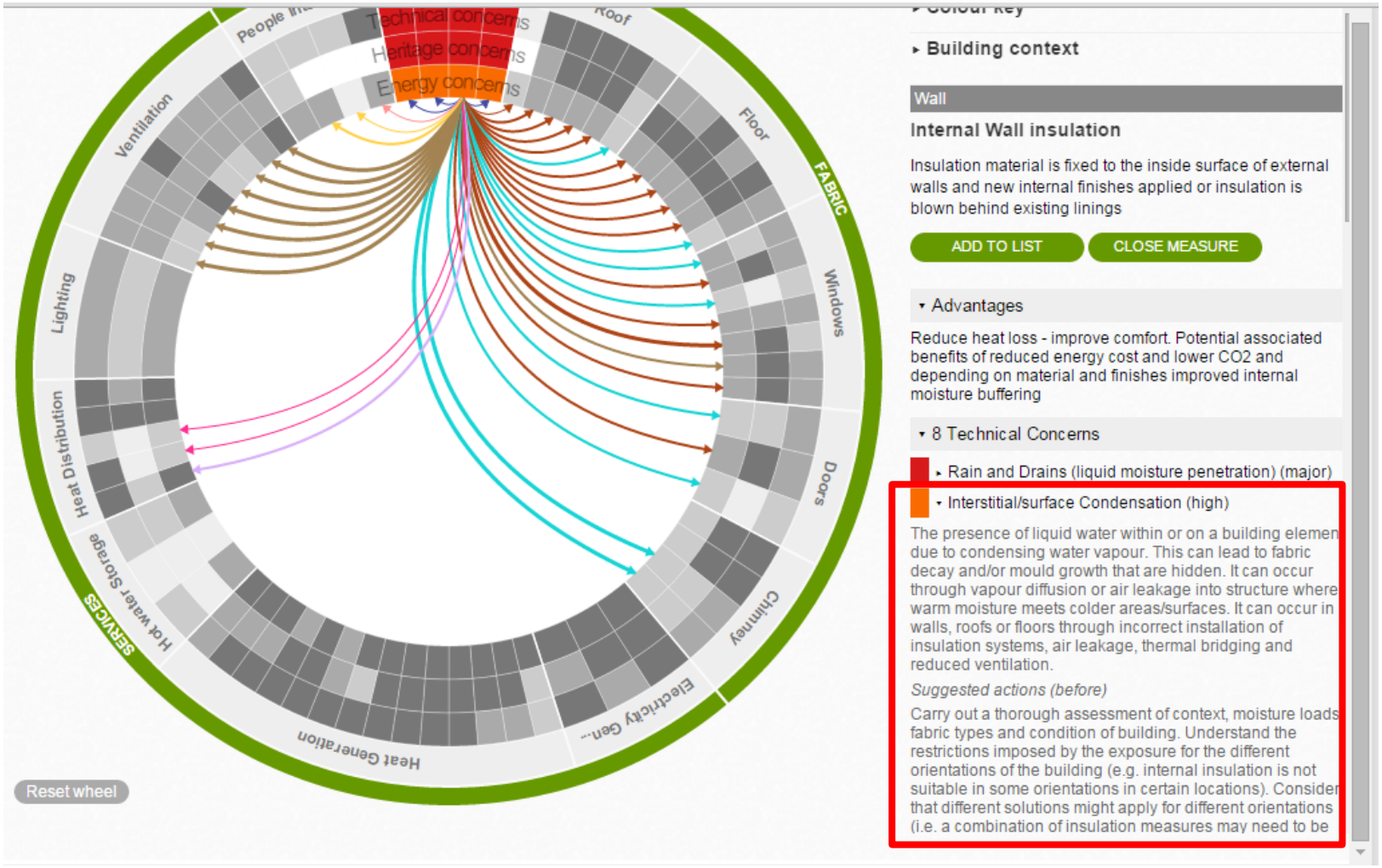

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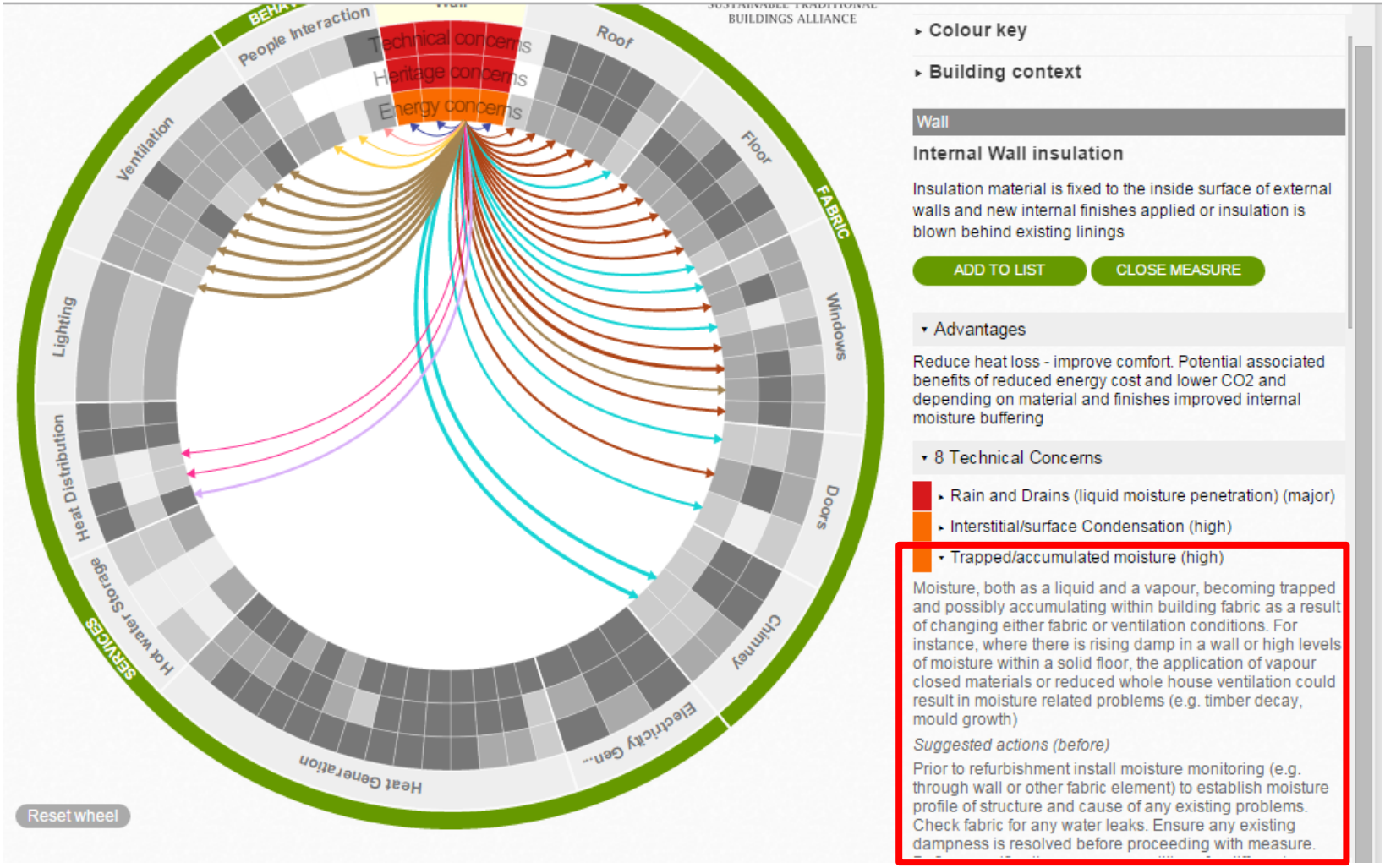

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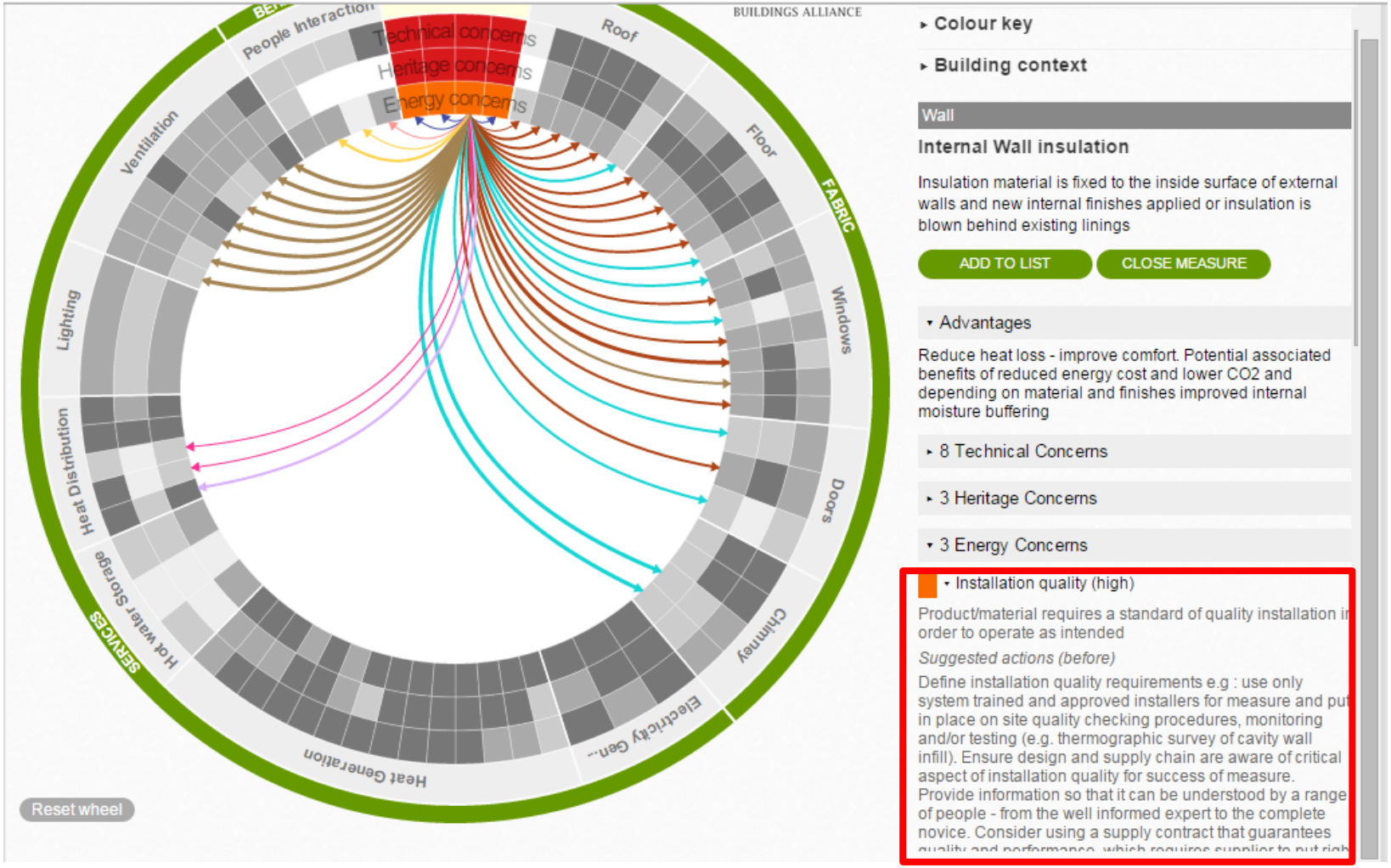
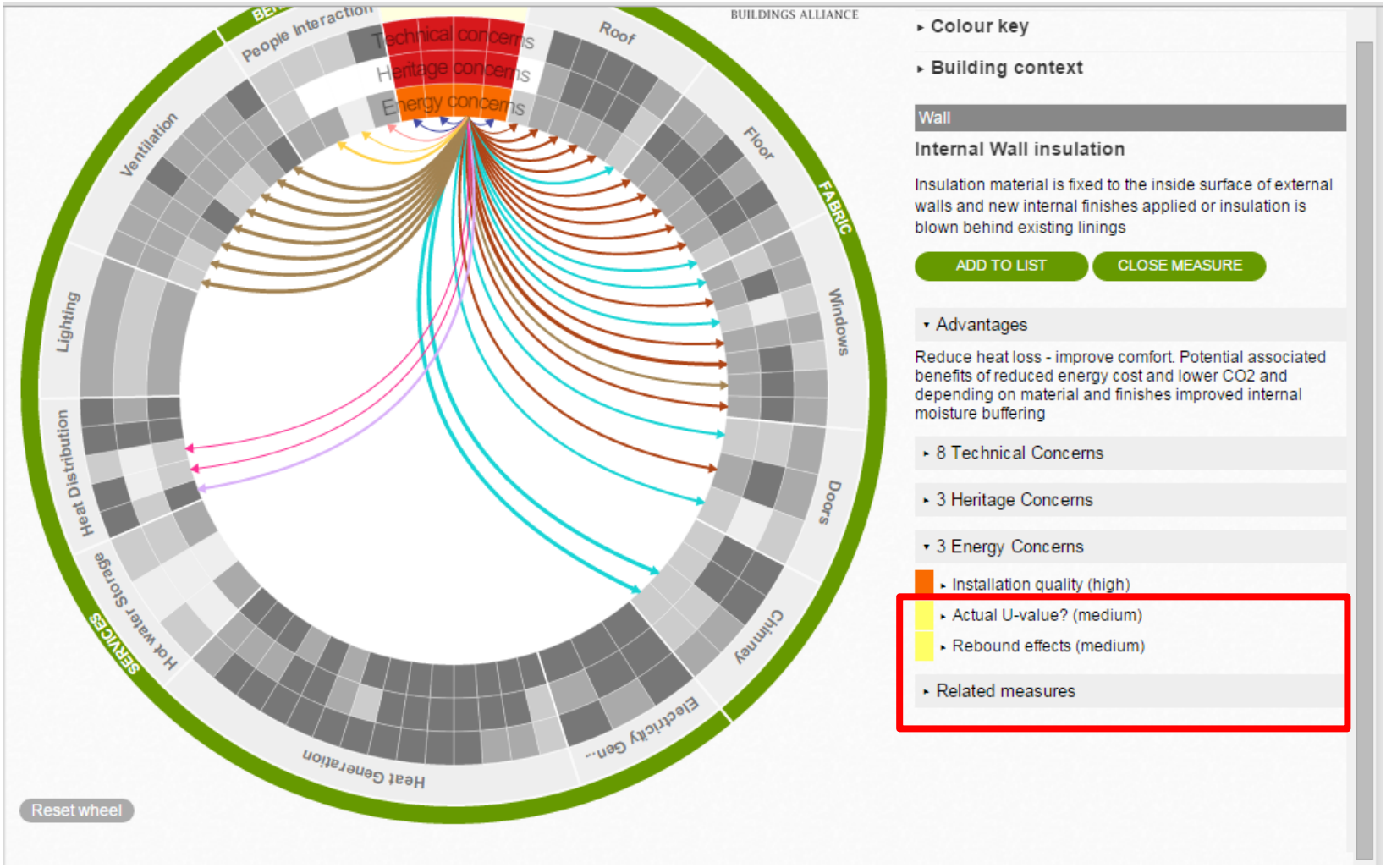


Choosing the RETROFIT measures



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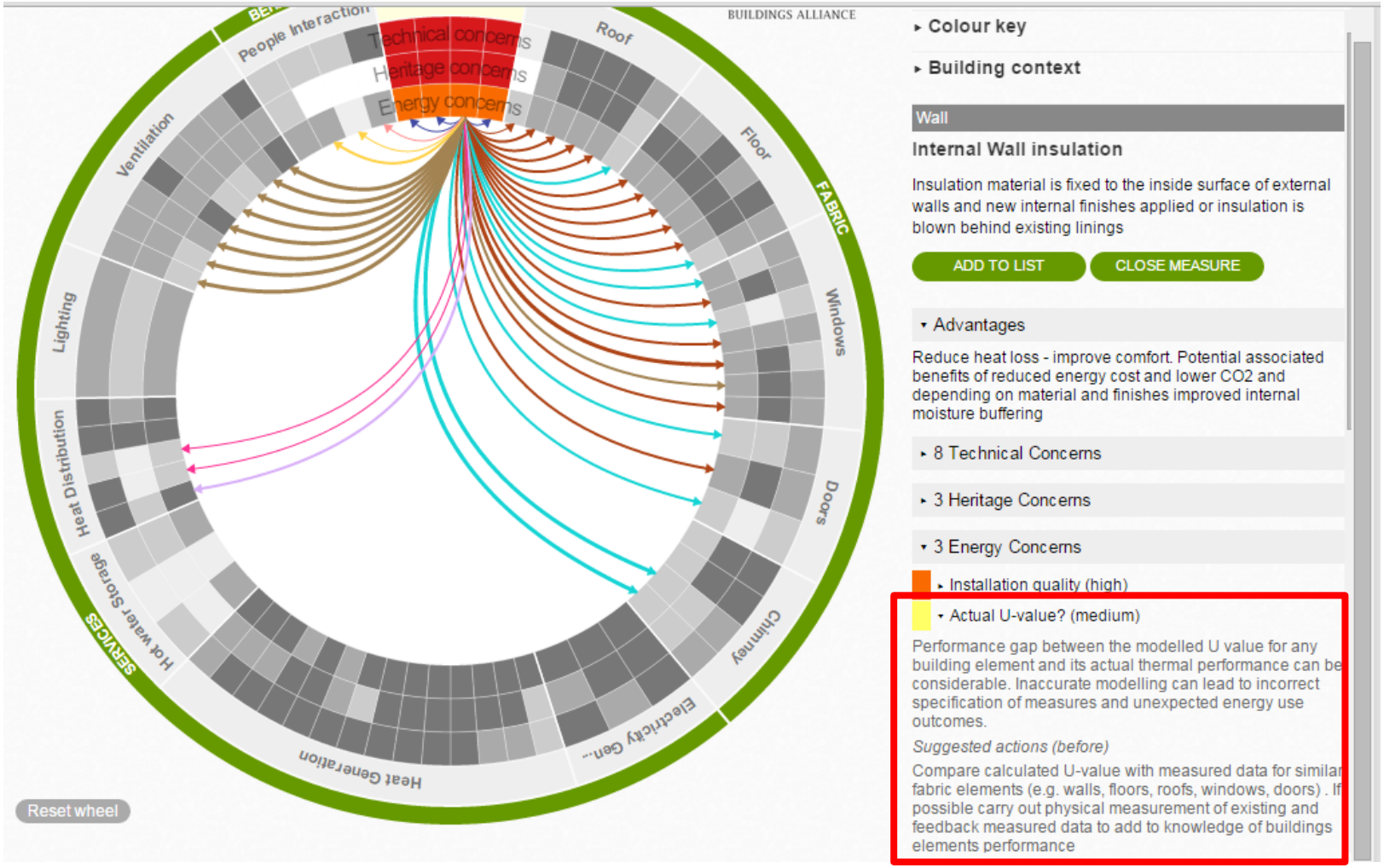
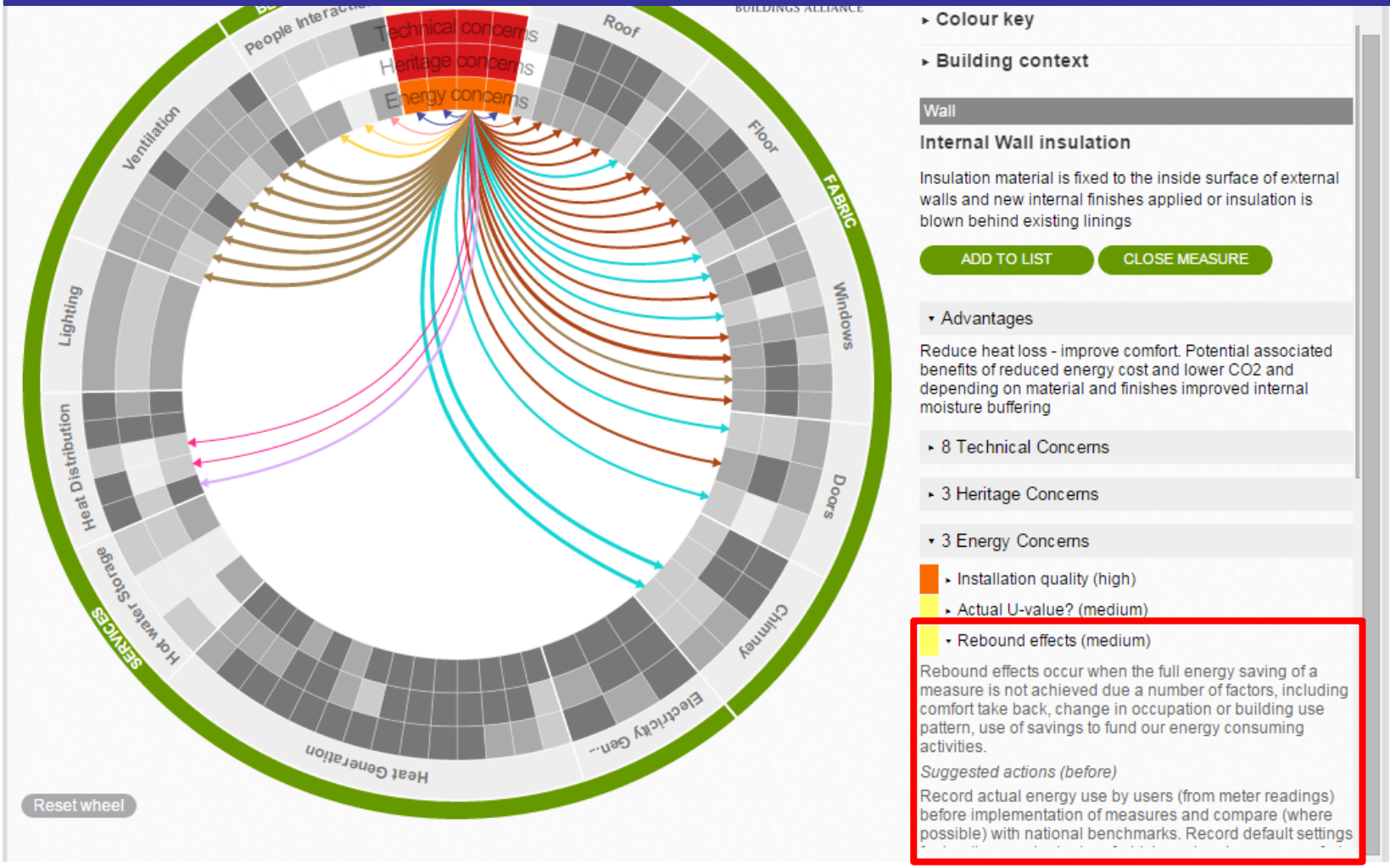
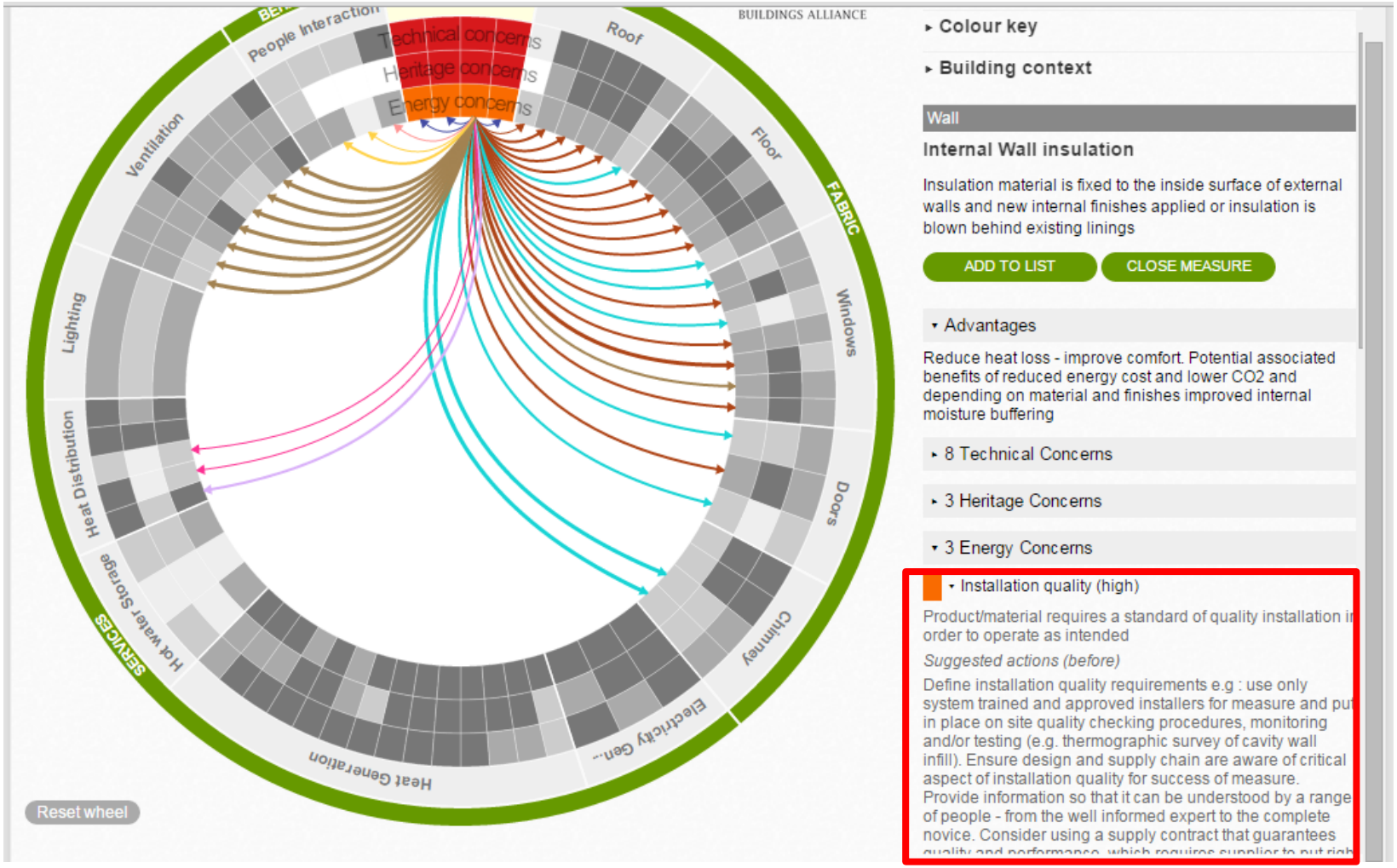


Choosing the RETROFIT measures



Choosing the RETROFIT measures



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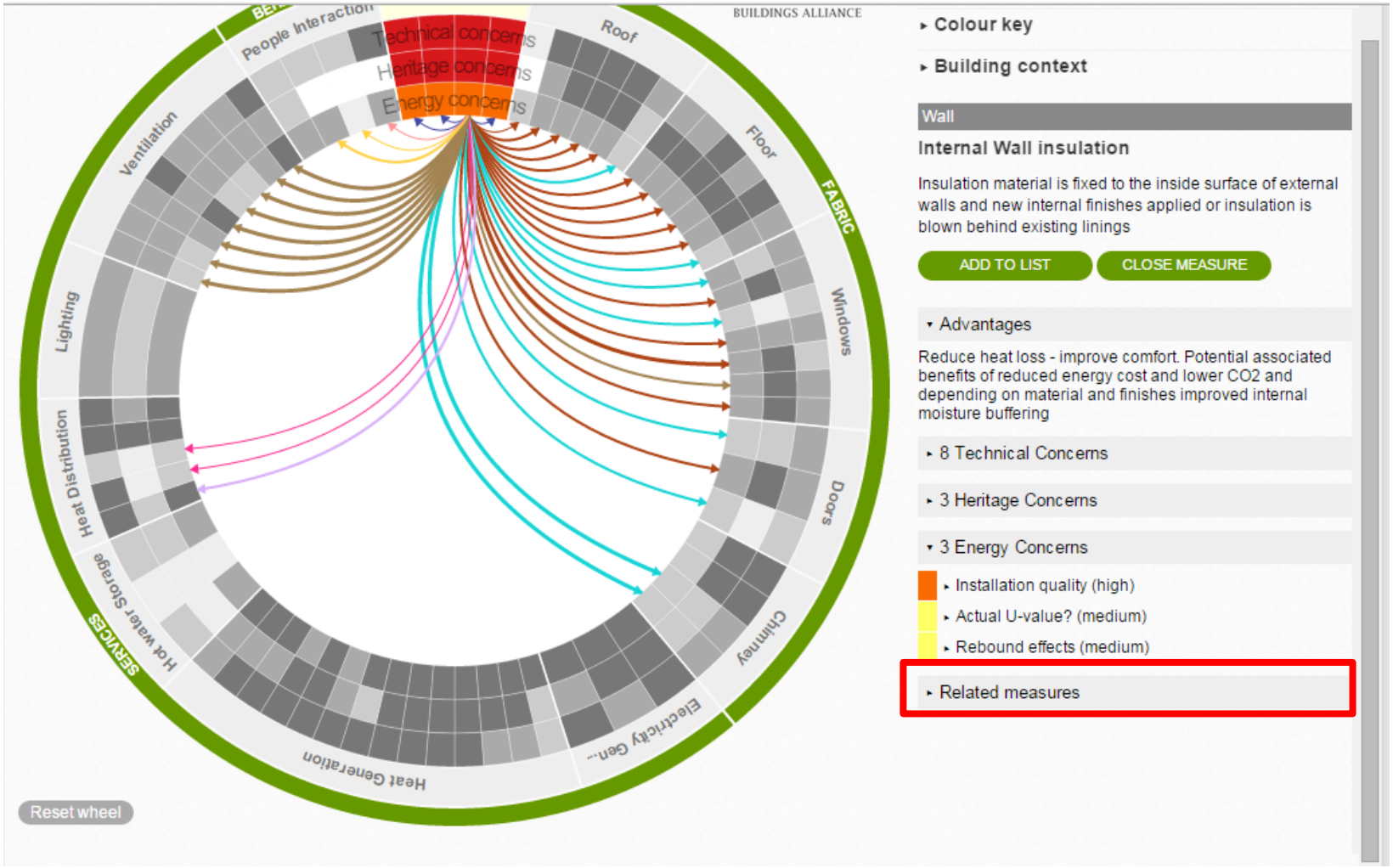

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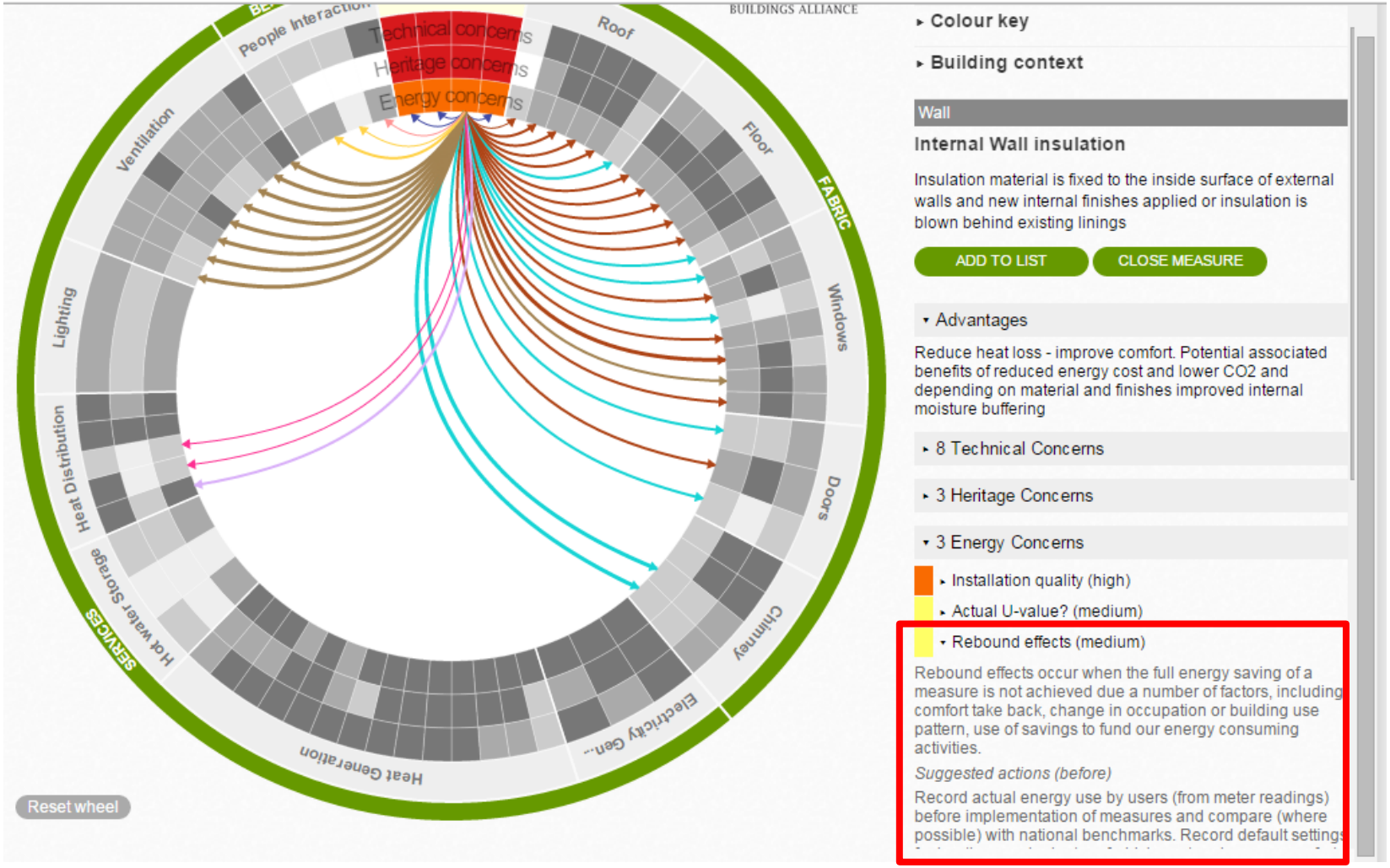

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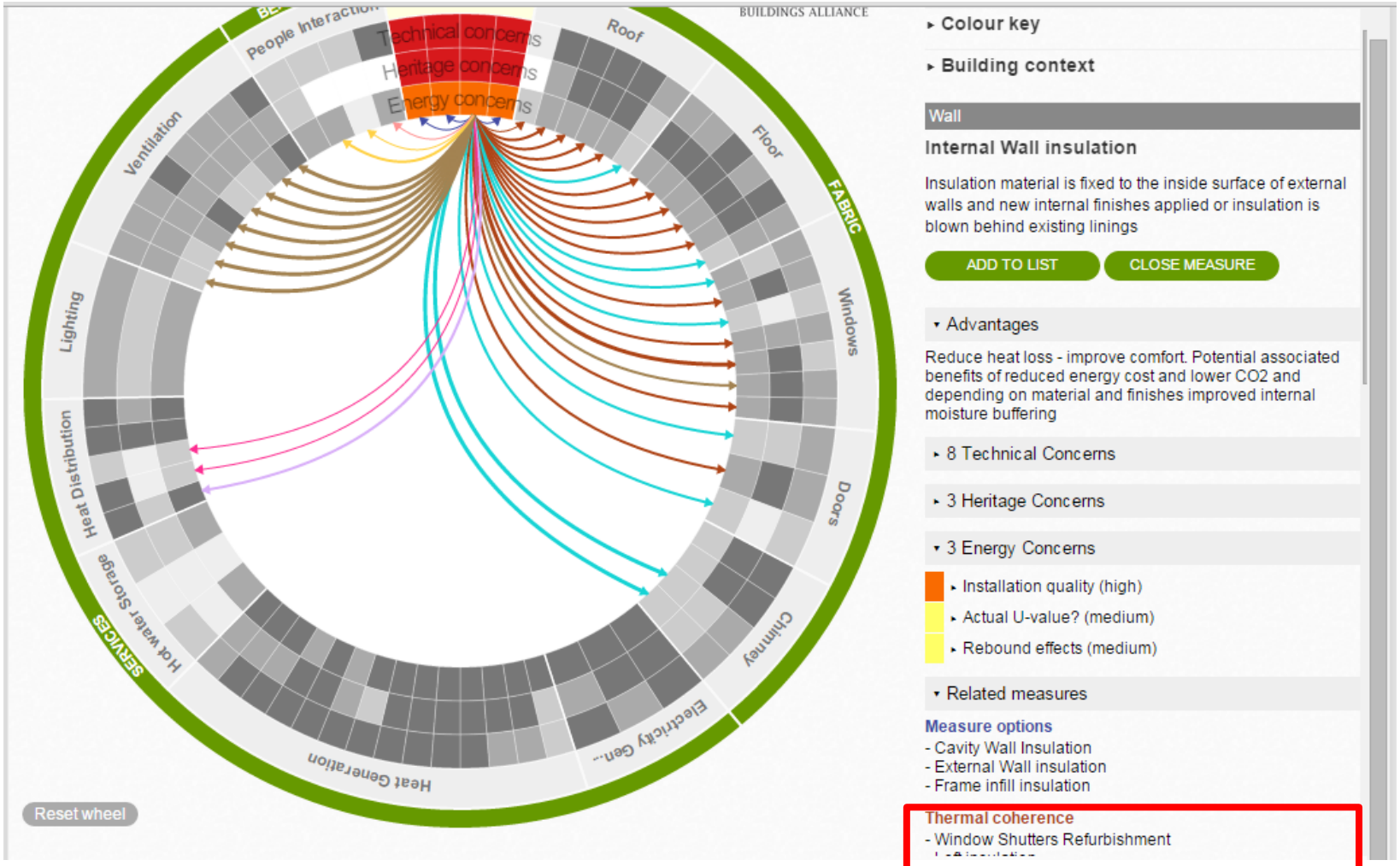
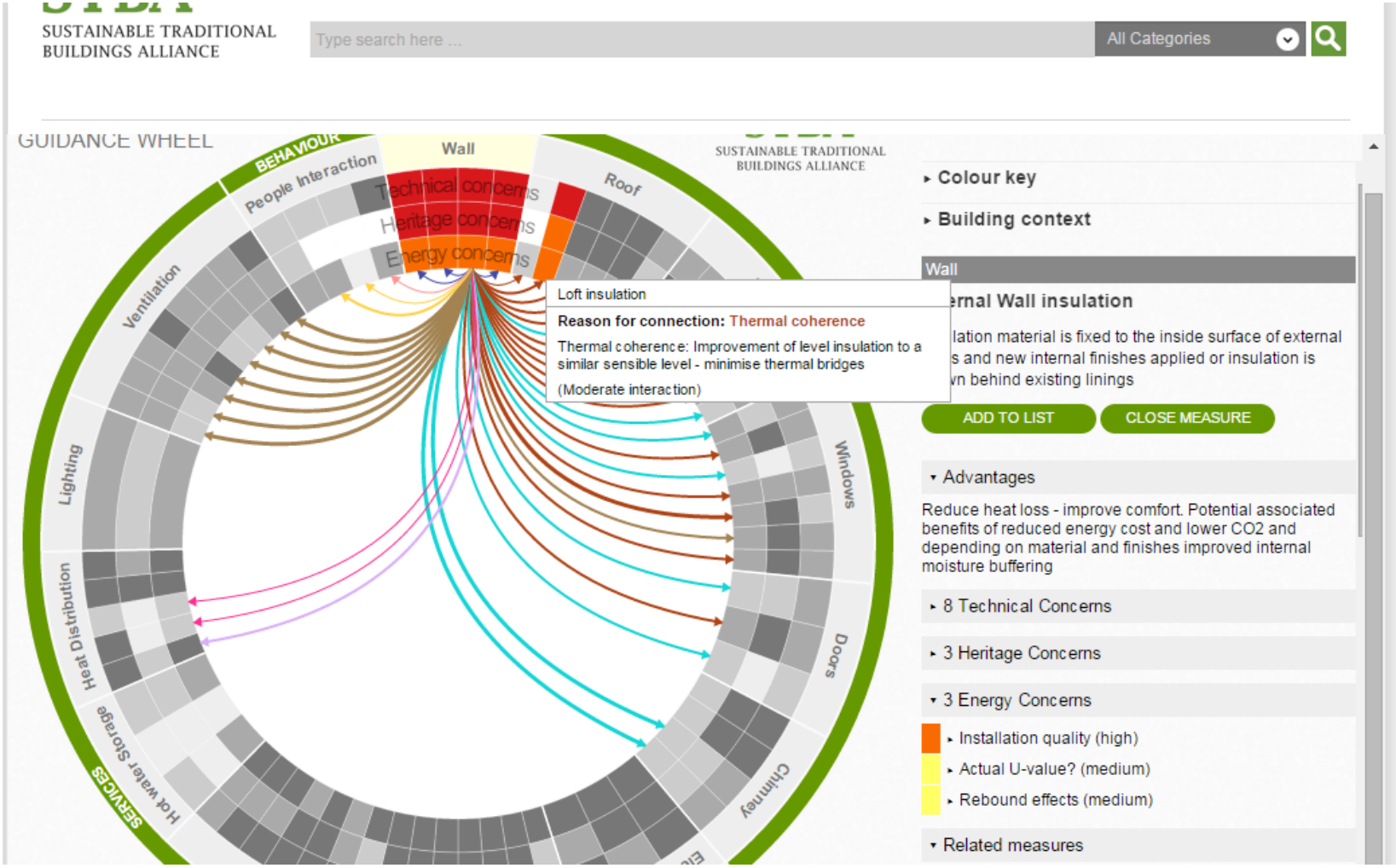
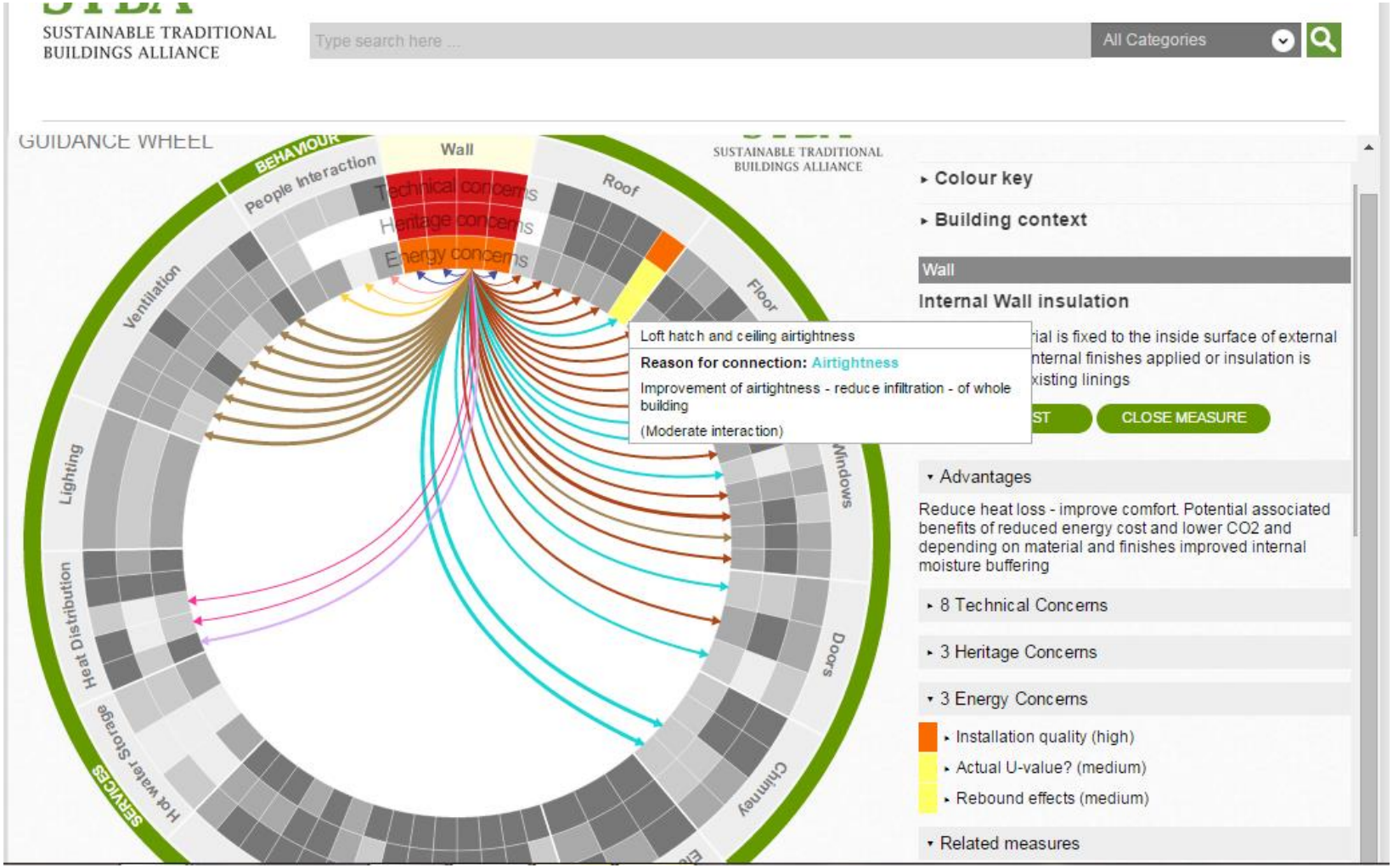


Choosing the RETROFIT measures



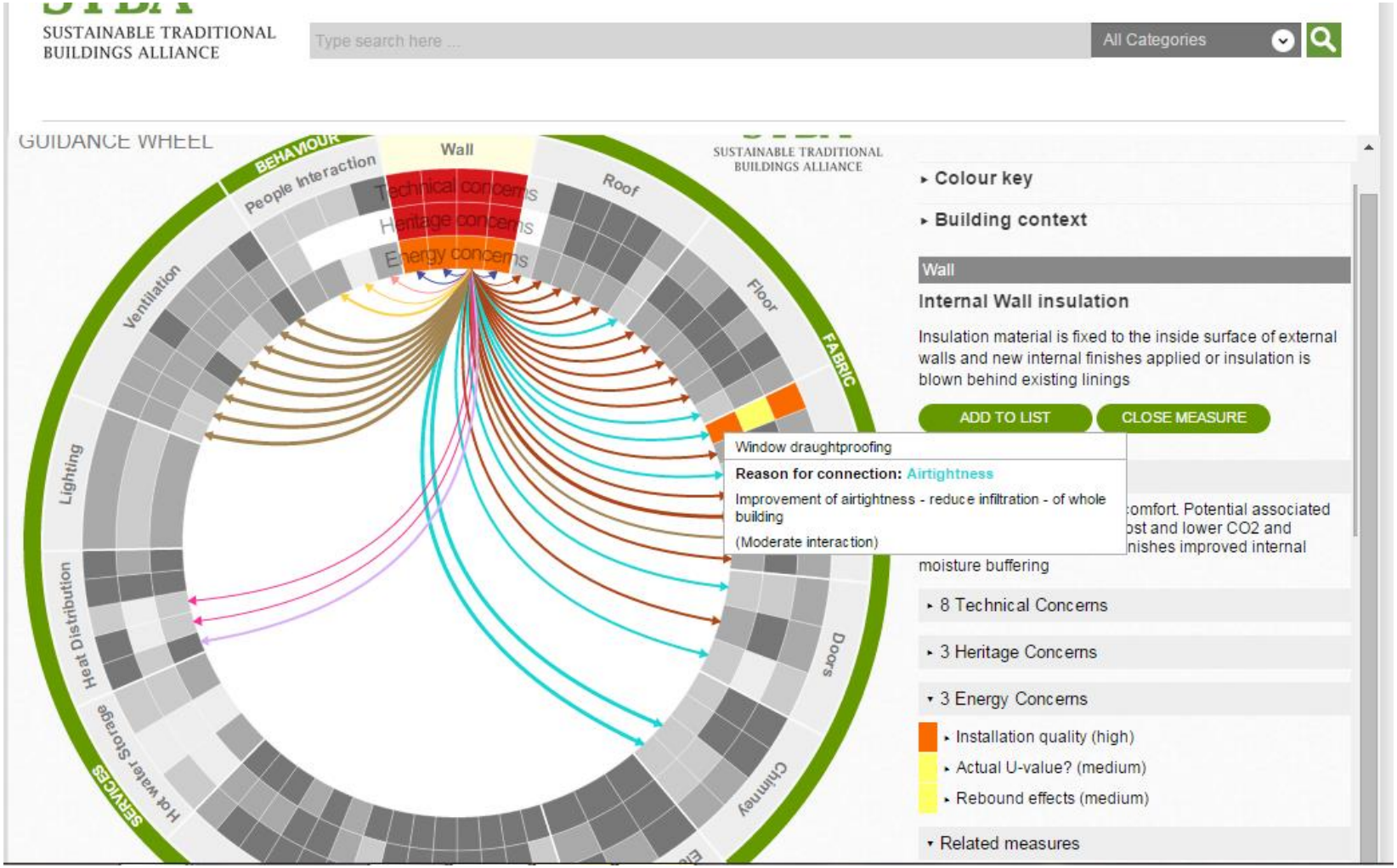
Stage 3 - Explore links

Choosing the RETROFIT measures



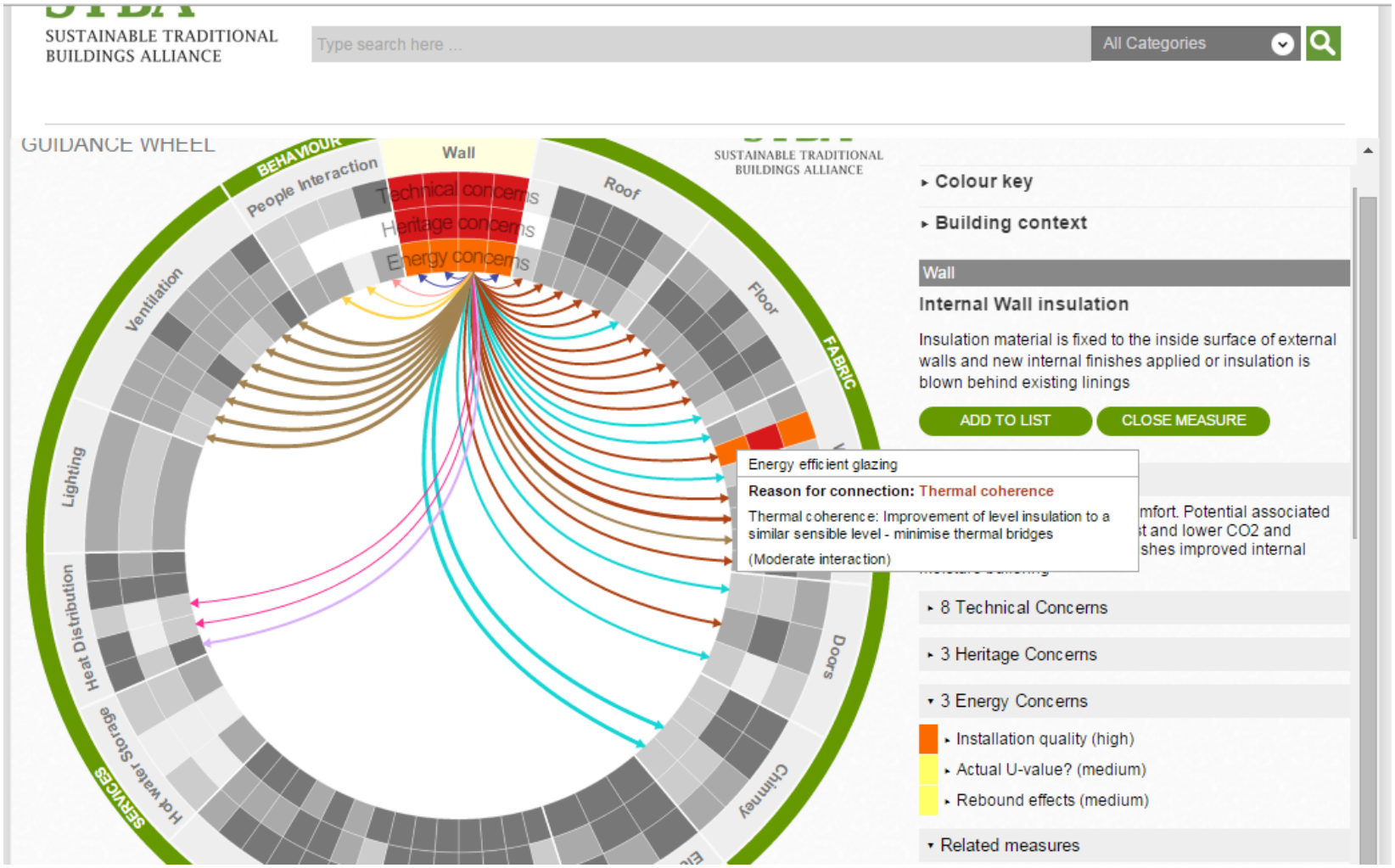
Stage 3 - Explore links

Choosing the RETROFIT measures



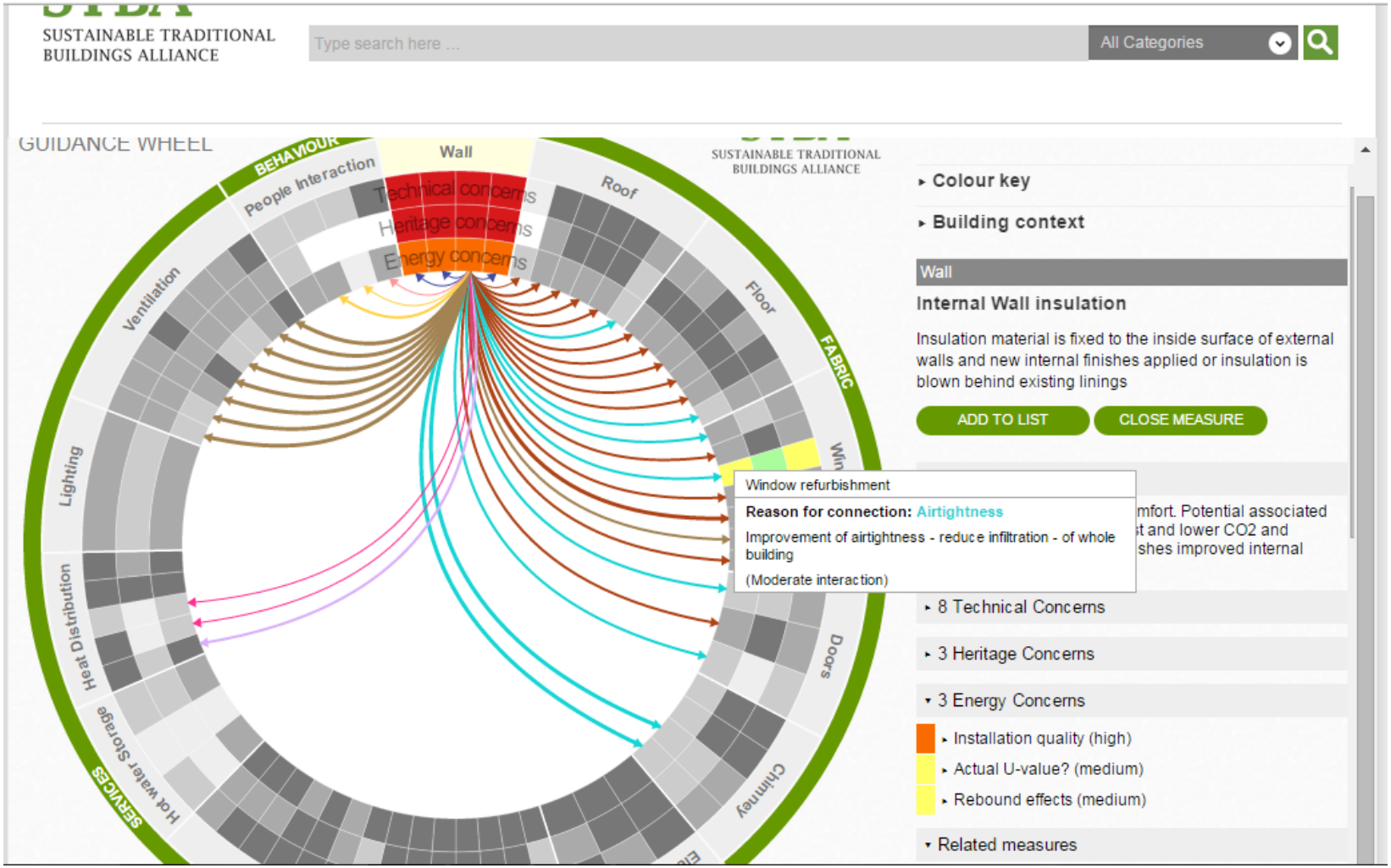
Stage 3 - Explore links

Choosing the RETROFIT measures



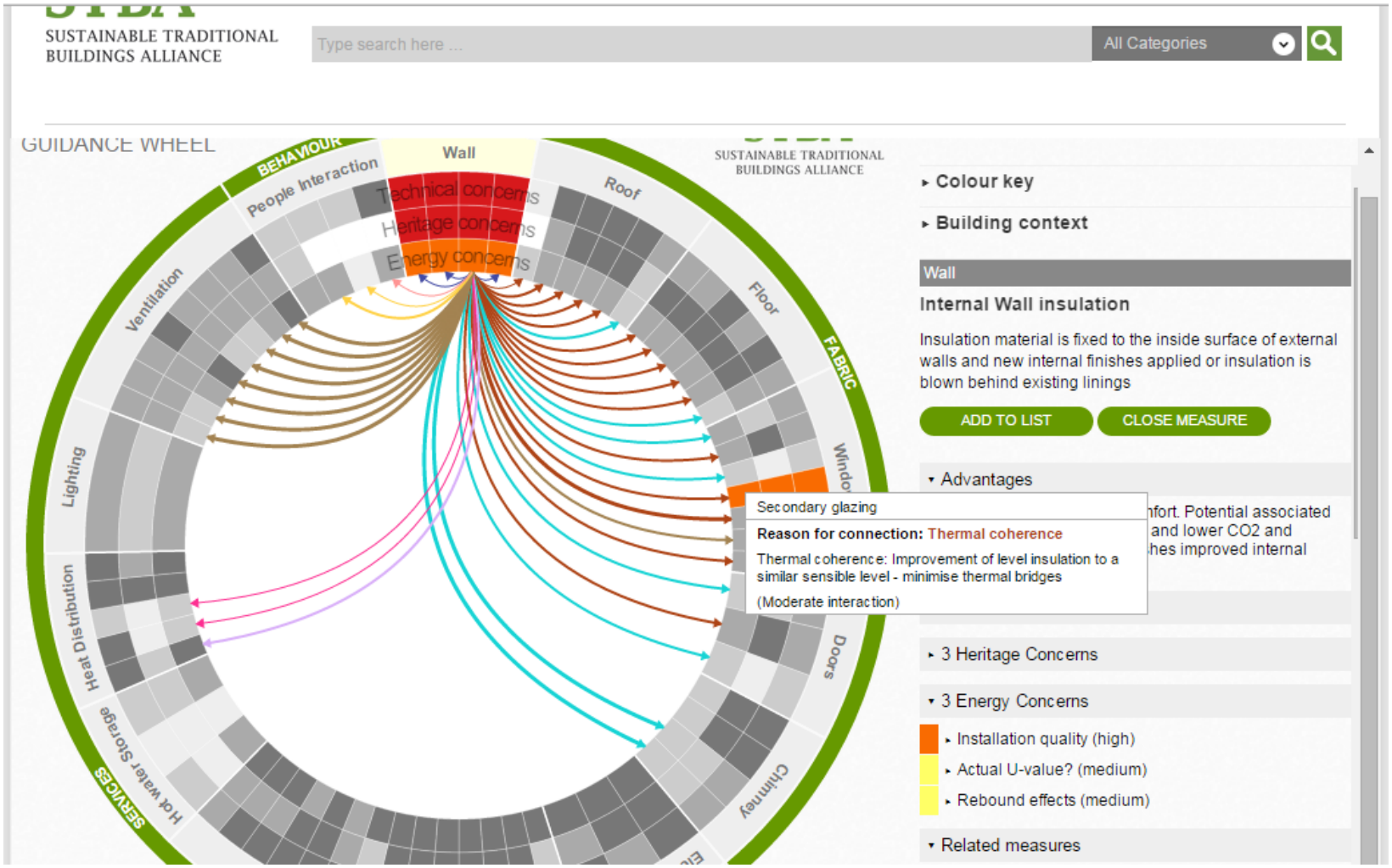
Stage 3 - Explore links

Choosing the RETROFIT measures



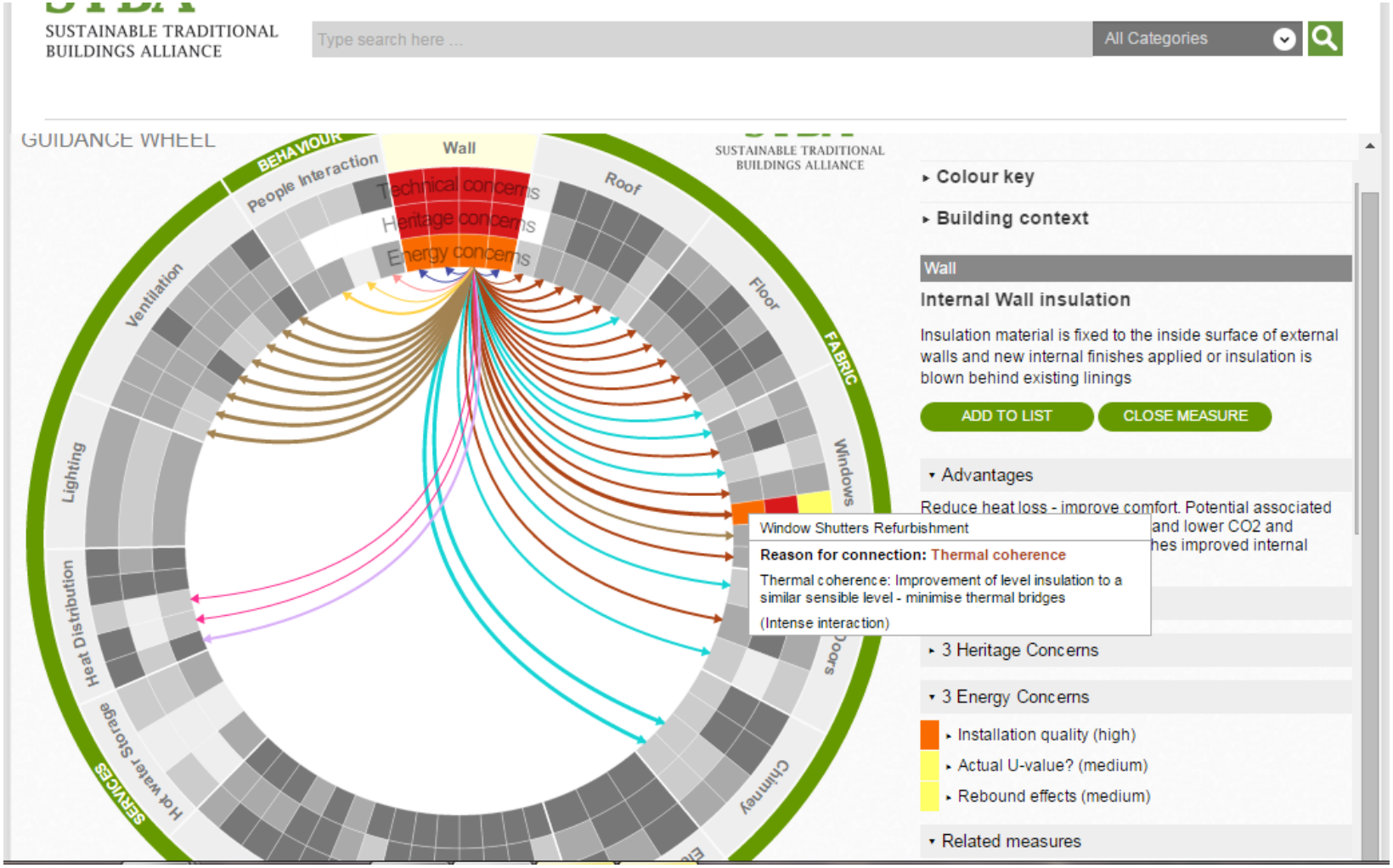
Stage 3 - Explore links

Choosing the RETROFIT measures



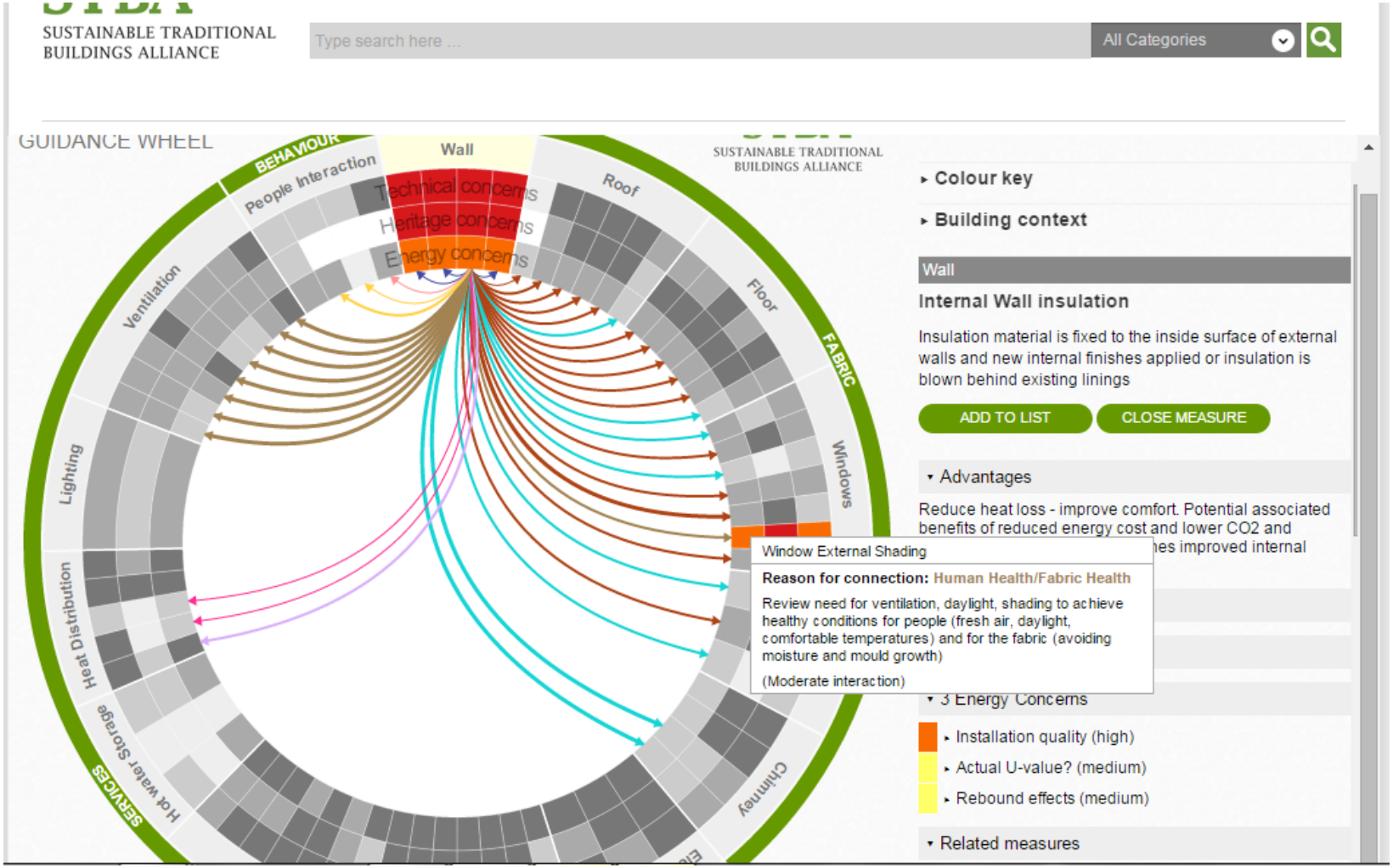
Stage 3 - Explore links

Choosing the RETROFIT measures



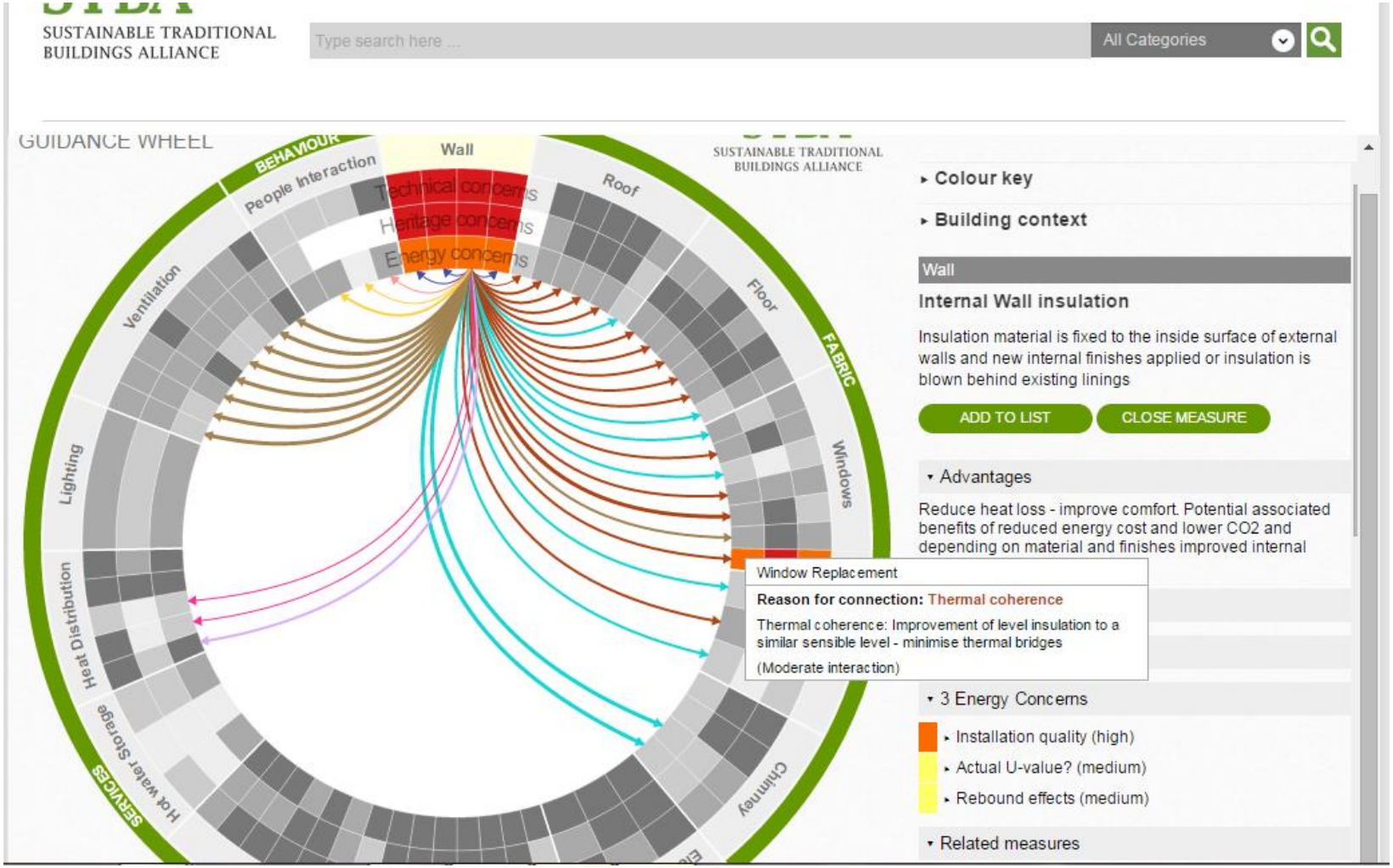
Stage 3 - Explore links

Choosing the RETROFIT measures



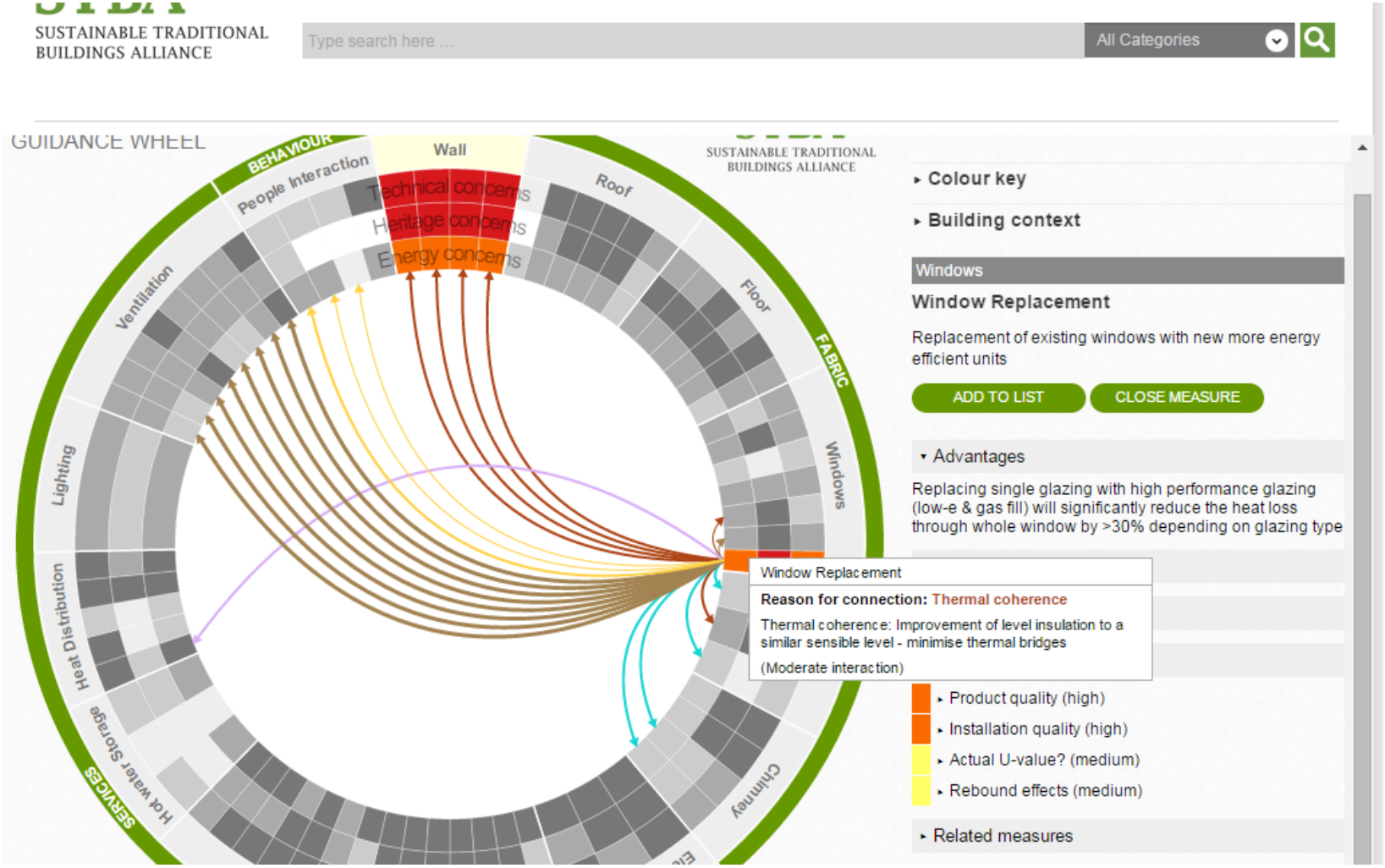
Stage 3 - Explore links

Choosing the RETROFIT measures



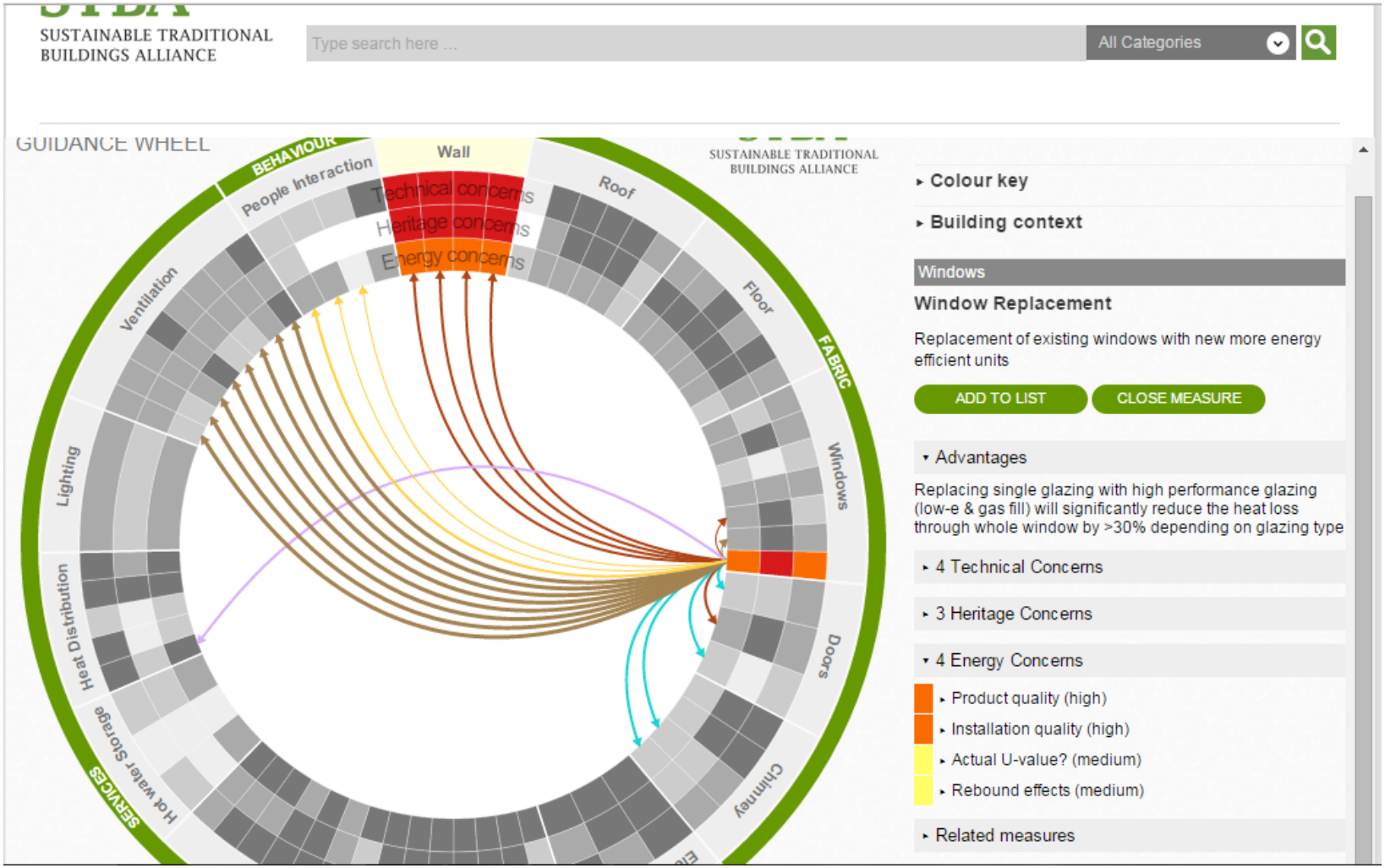
Stage 3 - Explore links

Choosing the RETROFIT measures



Stage 3 - Explore links

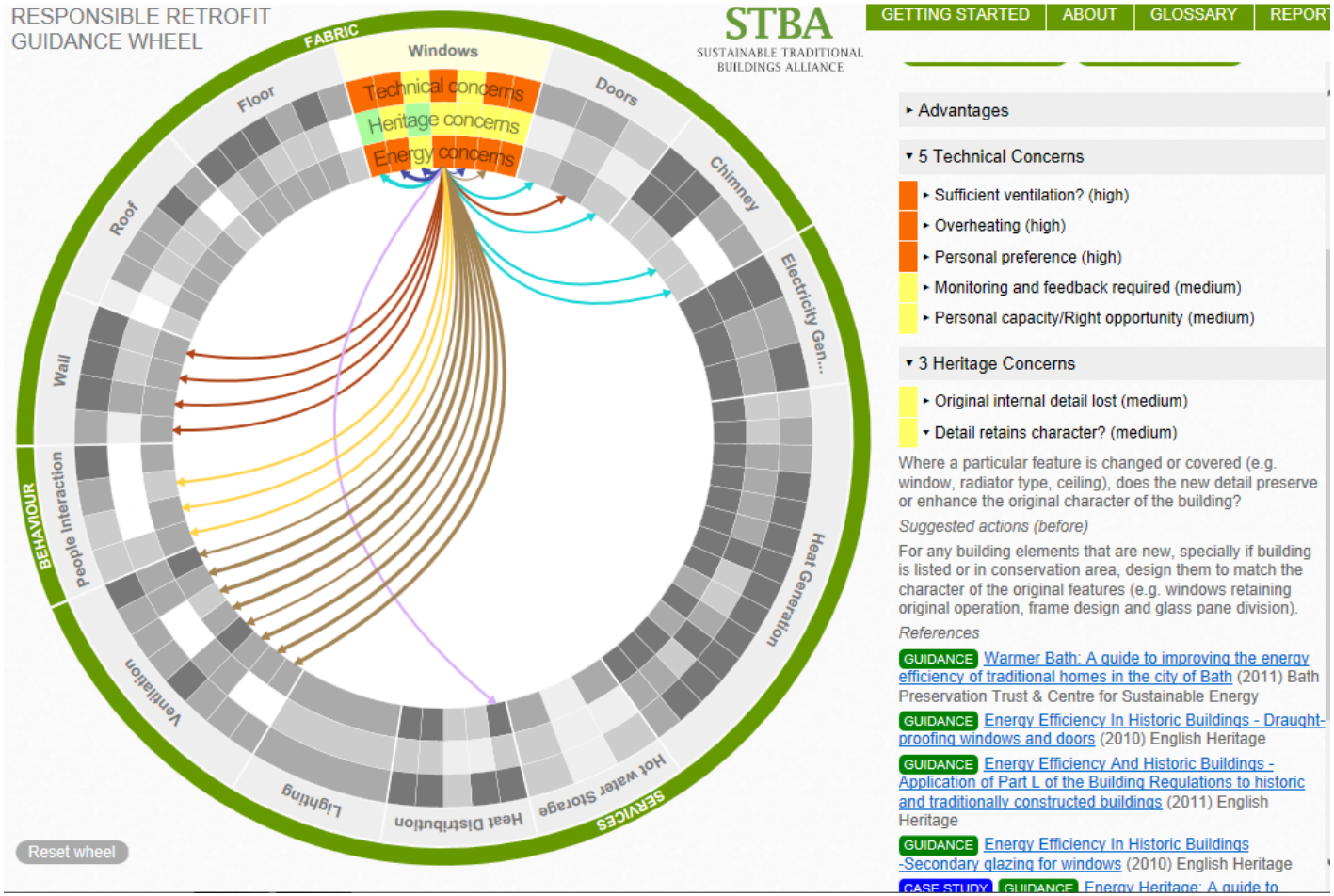
Choosing the RETROFIT measures



Stage 3 - Explore links

Choosing the RETROFIT measures

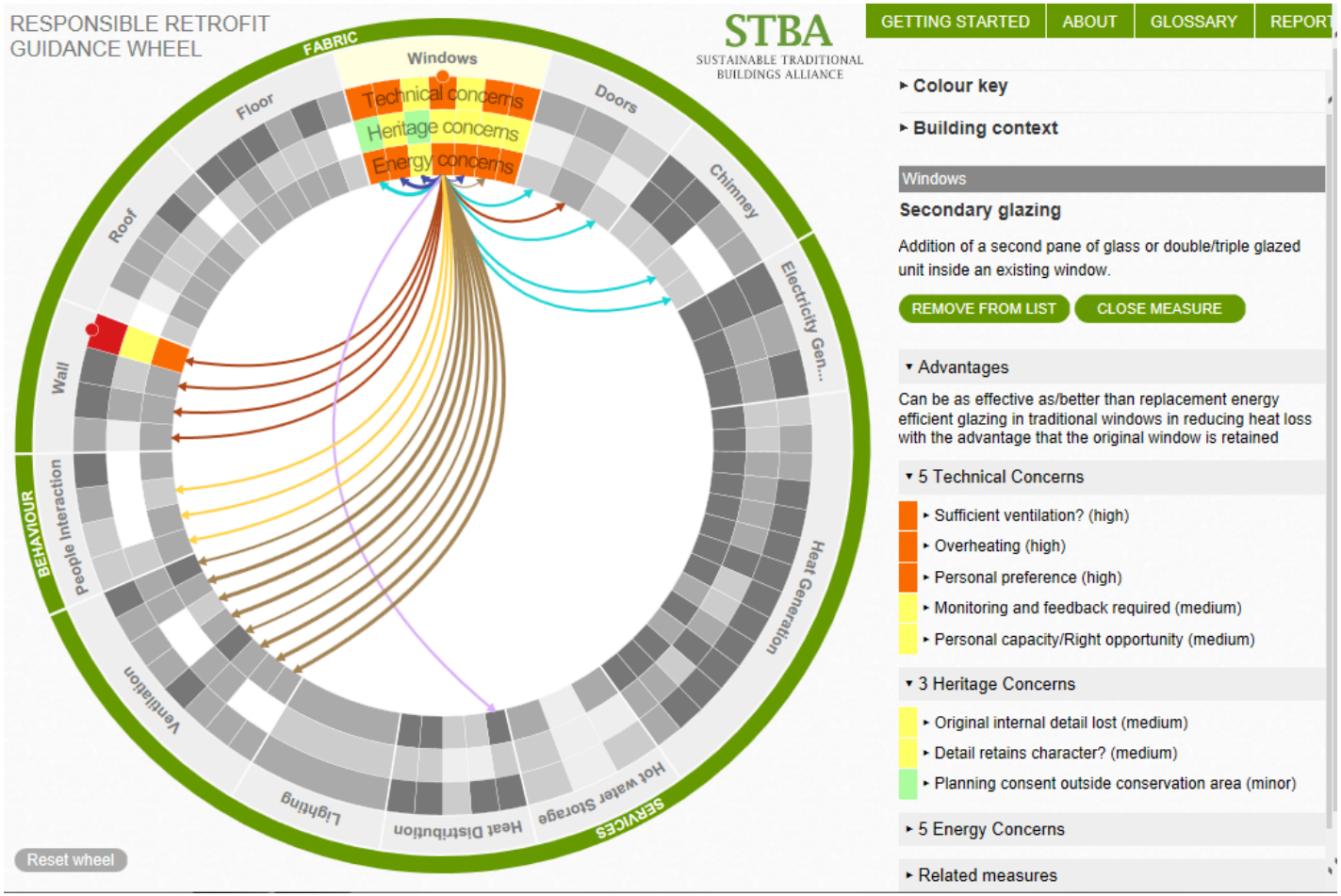
Stage 4 – Actions and References



Find our more detail: open each concern tab to look up definition of concern, actions before, during and after retrofit to minimise risk.
Relevant references are listed

Choosing the RETROFIT measures

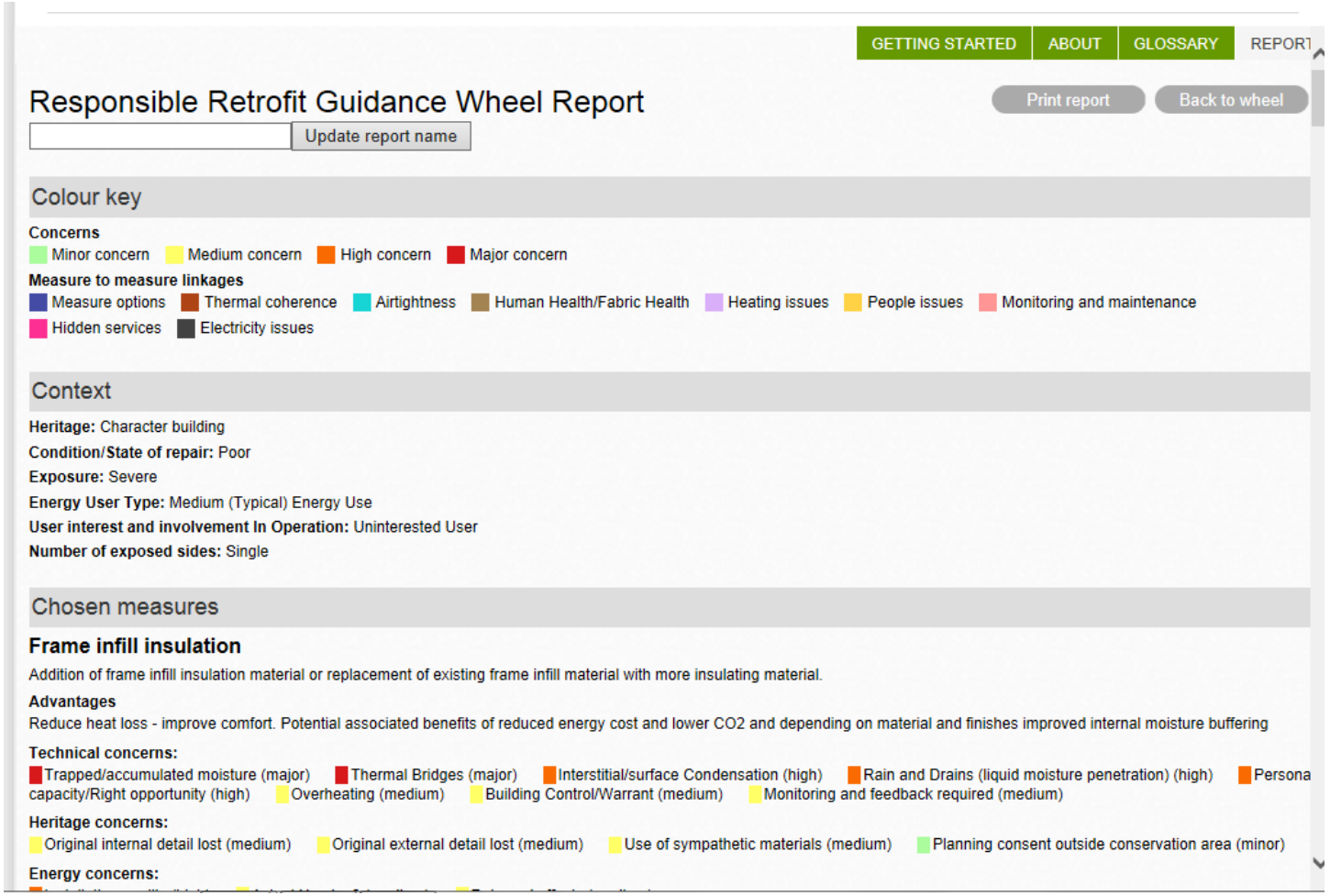
Stage 5 - Select measures



Select measures: choose the measures you are interested in by clicking the add to list button

Choosing the RETROFIT measures

Stage 6 - Report



Report: click the report tab to view a report of the chosen measures. Give a name to the report and print it out