

Ref. no.	Category / Title	Points	Status	Issue	Developed Solution
General	Building Footprint	-		Gross Floor Area and Building Foot Print are related as they are used to calculate density factor. However external wall thickness being included in GF and excluded in footprint creates inconsistency.	The original inconsistency was due to both definitions being derived from different international tools. It is deemed more appropriate that Building Footprint and Gross Floor Area either both include external wall thickness in order to be a true measure of density, or this is done in V3.2.
General	Appliance and plumbing Table	-		Overlapping documentation requirements for some credits was creating Duplication and making assessments onerous. Furthermore having details of appliances and fixtures stored across multiple credits made auditing more difficult.	Creates a central location to record details of appliances and key plumbing fixtures, which allow auditors to audit several credits quickly and easily, and reduces documentation burden for assessors.
General (process)	Submission Folders	-			Rearranged submission folders group credits with similar evidence requirements together, which allow auditors to audit several credits quickly and easily, and reduces documentation burden for assessors.
General (process)	Pro-Forma of Credit Compliance	-		Several 'minor' credits in the tool required unnecessarily onerous compliance evidence.	Some credits have been added to a Pro-Forma to be signed by the assessor after they have either viewed the project plans / specifications (Design rating) or verified details on site (Built rating). The assessor to sign the document to confirm they have completed it truthfully, and retain photos, plans and other documentation, which may be submitted upon request (for audit). The credits included are: EHC-8, EHC-9, EHC-10, EHC-11, WAT-3, WST-3, WST-4, MAN-1, MAN-2, STE-3, STE-3 (all ratings) and EHC-3 (Built rating only).
Energy, Health and Comfort					
EHC-2	Hot Water	4.5		The tool did not consider building wide shared hot water systems, wet back heaters used as boosters or very high efficiency heat pumps.	The EHC-2 tool now includes wetback boosters, centralised hot water systems and the ability to manually enter monthly average coefficients of performance for heat pump systems.
EHC-3	Lighting	2		The scope of the credit with respect to, balcony, common or outdoor areas of multi-unit developments was vague. Also requirement for integrated fittings was identified as obsolete in current market and a potential cost burden.	The credit no longer requires integrated fittings for full points, given that LEDs for bayonet and screw fittings are more widely available now at prices comparable to Halogen and CFL than when the credit was first created. There is also sufficient knowledge among consumers regarding energy savings of LEDs. The credit also moves apartment common areas and balconies into separate categories with specific scope and lighting requirements for clarity.
EHC-4	Energy Efficient Appliances	2		N/A option for dishwasher maybe used to claim points when a dishwasher will definitely be installed after assessment	N/A option can only be used if the dwelling is existing or if there are no dedicated space with connections provided for a dishwasher.
EHC-6	Whole House Thermal Performance	15		There is some ambiguity around acceptable process for calculating R-values, which may result in inconsistent and unreliable results for this credit. Also V3 Cooling calculator had issues that affected its reliability and was deemed too punitive.	Guidance for R-value, conditioned space area, and perimeter calculations each different dwelling layout scenario improved and moved to appendix. Projects may use ALF, the EHC-6 Standalone calculator or similar to calculate heating, or dynamic energy modelling can be carried out. If modelling, then cooling must also be modelled. Otherwise the manual provides guidance to see if overheating is likely to occur, in which case cooling loads should either be modelled or calculated using a third party calculator (as Homestar cooling calculator is no longer available, please submit CIR). Guidance for ALF in technical manual is reduced as this is much more comprehensively provided in the BRANZ ALF website, and assessors are encouraged to refer to this. The

					number of available energy modelling software has been expanded to explicitly accept PHPP (including Sketch up Plug-in), Open Studio, Safaira, as well as Revit and ArchiCAD plug-in modellers.
EHC-7	Moisture Control	4.5		The requirement for automating bathroom extract fans is vague as to the meaning of automation. Also, R-values are not necessarily an appropriate measure of mould prevention depending on location and other design elements such as thermal bridges.	Requirements for automation of bathroom extract fans has been clarified and split into two items: automation to turn on (0.2 points), automation to turn off (0.2 points). This is because both features have benefits, and limitations under various design situations, but for maximum benefit both turning on and off should be automated. The total available points for minimising likelihood of condensation (R-value) have been reduced from 1.6 to 1.5. This means that while it is still an important item, meeting the mandatory minimum requirements (which are unchanged) are not dependent on meeting a minimum R-value of 1.5 mK/W as long as ALL other items are met. Balanced heat recovery ventilation systems are presented as an alternative to meeting minimum R-value requirements. This allows older homes in temperate regions of NZ with significant sustainability upgrades but where installation of edge or underslab insulation is not practical to achieve 5+ Star rating.
EHC-8	Washing Line	1		Clarity required around length of secondary washing line	Where there are primary AND secondary (covered) washing lines provided, as long as the total line length meets the minimum requirements, points associated with length and cover can be awarded. However, the points for primary line can only be awarded if the primary line meets the length requirements
WHC-9	Sound Insulation	2		Requirements for all internal walls of apartment buildings to meet STC-58 resulted in a significant increase in building cost despite small number of points.	Wall in apartments that adjoin other apartments or regular inhabited areas such as common areas need to meet STC 58, but those adjoining transient areas such as corridors may meet STC 55.
	Total	31			
Water					
WAT-2	Rainwater Harvesting	6		Demand calculations for determining points used 200L/per person per day which was overly punitive for most areas of New Zealand where average water use is below this.	Demand calculations (and thus points) will be based on actual water use if this number is entered.
WAT-2	Internal Potable Water Use	6		N/A option for washing machine and dishwasher maybe used to claim points when these appliances will definitely be installed after assessment	N/A option can only be used if the dwelling is existing or if there are no dedicated space with connections provided for a dishwasher or washing machine.
		12			
Waste – No change to credits					
Management – No change to credits					
Materials					
MAT-2	VOCs & Toxic Materials	3		Some tables for VOC compliance limits of different construction tables removed	Missing tables have been added.

				from V3 tool.	
	Total	3			
Site					
STE-2	Native Ecology	1.5		No issues raised	Where the property is contained within a larger development owned/ maintained by one entity a common area approach may be used.
STE-3	On Site Food Production	1.5		No issues raised	Where the property is contained within a larger development owned/ maintained by one entity a common area approach may be used.
	Total	3			
Innovation –No change to credits					
Appendices					
Appendix 5	Conditioned and Unconditioned Spaces	-		No issues raised	The section on calculating R-values for different conditioned and unconditioned space/ floor types is moved to Appendix 5
Appendix 6	Pro-Formas	-		No issues raised	Copies of the Pro-Forma of Credit Compliance and the Pro-Forma for confirmation of Existing Dwelling is provided here

KEY



Minor changes to the credit criteria, compliance requirements or additional guidance



Major changes to the credit criteria



New credit or feature