NHBRC Innovative Building Technologies (IBTs) Database												Last updated: March 2019
No.	**System Type**	**IBT System Name**	**Company Name**	**Contact Person**	**Tel**	**E-mail**	**NHBRC Rational Design Approval/ Agrèment Certified**	**Description**	**On Site Contact for Already Built Projects**	**Already Built Projects**	**Manufacturing**	**Photo of a Building**
1	Walling and Building System	Abod Shelters/Abod Homes (WITHDRAWN)	HMR Homes (Pty) Ltd	Jacques Hammer	**Landline:** 082 410 4187 **Cell:** 082 410 4187	jacques@abod.co.za	**Type of approval:** Agrèment **Certificate number:** 2015/495 **Date of approval:** 5 November 2015 **Status:** Active 2016	The Abod home is based on the catenary arch as the strongest natural form in nature. Fully insulated, water and wind tight, the Abod is ideal for all low-cost housing opportunities. It uses high quality A1 fire rated insulation to ensure residents are kept cool in the summer months and warm in the winter months. It can be built within a day. The Abod is also a proudly South African product and all materials used is locally manufactured. It comes in various sizes and colours.	1. Jacques Hammer, Cell 082 410 4187 2. Dustin Blessman, Cell 072 310 2221 3. Nicky Vernon, Cell 082 558 7752	1.**Name of project:** Eric Molobi Innovation Hub **Type of building:** Gap housing **Physical address:** Eric Molobi Housing Innovation Hub,1618 Juventus Street, Soshaguve, Pretoria, GAUTENG **No. of buiildings:** 1 **Size of buildings:** 30m² **Co-ordinates:** **2. Name of project:** Mokopane Blessman Ministeries **Type of building:** Warehouse Building **Physical address:** Same entrance as Shikwaru Lodge, Mokopane road, LIMPOPO **No. of buiildings:** 1 **Size of buildings:** 50m² **Coordinates ;** GPS E28, 54"2888 S 24,15"287 **3. Name of project:** **Type of building:** Houses **Physical address:** 2 Park Street, Greyton, Cape Town, WESTERN CAPE **No. of buiildings:** 10 **Size of buildings**: 45m²	**Manufacturing:** Local plant **Address**:Unit 8, Schooner Street, Lazer Park, Honeydew, Johannesburg (Products manufactured: All Local)	
2	Dry Walling System	Saint-Gobain Rhinowall System	Saint-Gobain Construction Products SA (Pty) Ltd	Sibusiso Mthembu	**Landline:** 012 658 2854 **Cell:** 082 894 0805	sibusiso.mthembu@saint-gobain.com	**Type of approval:** Agrèment **Certificate no.:** 2006/327 **Date of approval:** 29 June 2010 **Status:** Active 2016	12.5mm Gyproc RhinoBoard is fixed to both sides of the framework using Gyproc RhinoBoard Sharp Point Screws 3.5mm diameter x 25mm at maximum 220mm centres. Isover Cavitybatt insulation is securely fitted with closely butted joints, leaving no gaps. Unless the insulation is of a self-supporting batt type fitted between studs then it is fixed at head of frame using Donn Galvanised Steel Angle 25mm x 25mm. All joints are staggered. In wet areas a face layer of 12.5mm Gyproc RhinoBoard 12.5mm with Gyproc Moisture Resistant Board is placed. The framework consists of Donn UltraSTEEL™ Studs 63.5mm x 35mm friction fitted into top and bottom Donn UltraSTEEL™ Track 63.5mm x 25mm at 600mm centres. Gyproc RhinoTape is applied to all joints and internal corners. Donn Corner Bead is applied all external corners	1. Sibusiso Mthembu,Cell 082 894 0805	1. **Name of project:** Diepsloot Housing Project **Type of building:** PHP Housing **Physical address:** 1007**,** 989 Tlou Street, Diepsloot West, GAUTENG **No. of buildings:** 40 units **Size of buildings:** 51.8m²	**1. Manufacturing:** Gyproc **Address**: Ergo Road, Vulcania South, Brakpan, Johannesburg **2. Manufacturing:** Isover **Address:** No 2 Iron Road New Era, Springs **3. Manufacturing:** Donn Products **Address:** 77 Ostend Rd, Delville, Gauteng, 1401. (Products manufactured: 1. Gypsum Board, 2. Insulation, 3. Stud & Track)	
3	Walling and Building System	Kavango Block Brick (KBB)	Kavango Block Brick CC	James Arm	**Landline:** 021 856 5213 **Cell:** 082 500 8224 **Windhoek:** +264 81 203 5271	kavangobrick@iway.na www.kavangobrick.com	**Type of approval:** NHBRC approved rational design **Date of approval:** 8 February 2010 **Certificate no.:** **Status:**	The KBB interlocking masonry blocks are manufactured using standard materials associated with conventional masonry blocks. The uniqueness lies in the interlocking features. Blocks are bonded together using block grip; a Thin Bed Mortar system (TBM). The 140 range includes: starter block (without tongue for first course), main block, lintel block, corner block, window sill block and gutter block. Every 6th course consists of a ring beam which replaces brick force used with conventional masonry block construction. Each ring beam is reinforced with Y10 steel and 25MPa concrete, which ensures optimum stability. Skimplaster is applied to the walls in order to prevent water penetration, particularly in wet climate regions. Typically a floated foundation is used and is always designed as per the appointed engineer's specifications. Roof systems are conventional, with exception to our KBB designed roof anchor bracket which replaces conventional anchoring methods.	1.James Arm, Cell 082 500 8224/ 021 856 5213	1. **Name of project:** SAHF Housing Project 2008 **Type of building:** Show House **Physical address:** Erf 3634 Sabatini Road Scottsdene, WESTERN CAPE **No. of buildings:** 1 **Size of buildings:** 55m² two bedroom **2. Name of Project:** Innovative competition Wellington 2009. **Type of Buildings:** BNG & Affordable **Physical Address:** Erf 11523 and ERF 11517 Noordkamp, Wellington, WESTERN CAPE **No. of buildings:** 2 **Size of Buildings:** 42.7 & 51.0 m² **3. Name of Project:** NHBRC / DHS project **Type of Building:** Custom designed housing unit as per NHBRC plan design **Physical Address:** Erf 2824 Kuquala Street,Nyanga East, Cape Town, WESTERN CAPE **No. of buildings:** 1 **Size of Building:** 60.0m²	**Manufacturing:** KBB Manufacturing Plant **Address**: Townlands Road, Northern Industrial, Windhoek, Republic of Namibia. **Products manufactured:** KBB 140 Range of interlocking masonry blocks.	
4	Walling and Building System	RBM Greenbuild Building System (Pty) Ltd	RBM Greenbuild (Pty) Ltd	Thami Khanyile	**Landline:** 031 713 0738/7 (Not there any more) **Cell:** 081 788 6075 or 078 749 1745	thami@khuthala.co.za	**Type of approval:** Agrement Certificate **Date of approval:** 6 August 2013 **Certificate no.:** 2013/430 **Status:** Active 2016	RBM Greenbuild System consists of a batching machine, LW reusable formwork and RBM foam micro- concrete. The batching machine is designed and manufactured in accordance with ISO 9001:2008 standards. Formwork is made from light gauge steel and predesigned according to architectural design. The system utiliises conventional foundations of concrete which are always the responsiblity of the engineer. The shutters are erected on a level slab and then pumped with foam micro-concrete, once cured shutters are stripped. The roof is constructed of conventional standard light-weight steel or timber trusses either clad with metal sheeting or concrete roof tiles.	1.Thami, Cell 078 749 1745	1. **Name of project:** 2012 Show Units **Physical address:** 35 Joe Slovo Place, KwaNdengezi, Ethekweni, KZN **No. of houses:** 2 show units **Size of houses:** 45m² **Co-ordinates:** S29.86131 - E30.76865 **2. Name of project:** 2012 Show Units **Physical address**: Erf 867, Ntshebeyembuzi Drive, Malugazi, KZN **No. of houses:** 2 x show units **Size of houses:** 45m²	**Manufacturing:** Light weight concrete batched on site. Additives to be imported from Malaysia **Project:** As the project location **Products manufactured:** Shutters manufactured locally. Pinetown, Durban	
5	Walling and Building System	UCO Solid Wall Building System	United Fibre Cement Company (Pty) Ltd	Leon Bekker	**Landline:** 021 933 0052 **Cell:** 082 785 2807	leon@ufcc.co.za erica@ufcc.co.za	**Type of approval:** Agrement Certificate **Date of approval:** July 2012 **Certificate no.:** 2012/407 **Status:** Active 2016	The UCO Solidwall Building system consists of a cold rolled light gauge steel frame that is designed and erected in accordance with SANS 517. The frames are usually between 2.4m to 3.0m high and studs at 600 mm spacing's or as determined by the design engineer. The frame is manufactured from 0.8 mm thick galvanised steel lipped channel 90mm x 41mm x 9.6mm. The external and internal composite walls comprise of a 6mm - 9mm UCO Flexabord (fibre-cement board) on both sides encapsulating a EPS beaded concrete core infill with a density of 900kg/m³. The overall thickness of the composite wall is 102mm thick. Doors and window frames can either be galvanised steel, aluminium or timber. The roof trusses are constructed from light gauge galvanised steel channel sections with light or heavy weight cladding. The walls are finished with a layer of Gamma trowel-on plaster, 1.1mm - 2.4mm thick on both sides. All other services are conventional and conduit holes are pre-drilled in the frame. The foundations and the floor slab are conventional and are always the responsibility of a registered competent professional engineer.	1 .Leon Bekker, Cell 082 785 2807 2.Kganki Gololo, Cell 081 591 1164 (Mine houses)	**1. Name of project:** House military veteran **Type of building:** Veteran housing **Physical address:** Stand Number 426, Mabaligwe Street, Boxahuku, Malamulele, Venda, LIMPOPO **No. of buiildings:** 1 **Size of buildings:** 85m² 2. **Name of project:** Non-Subsidy **Type of building:** Property Development **Physical address:** Aggeneys, NORTHERN CAPE **No. of buiildings:** 93 Mine houses **Size of buildings:** **Coordinates:**	**Manufacturing:** On site **Address**: As per project address **Products manufactured:** Complete system	

6	Walling and Building system	Robust	Robust Structures (Pty) Ltd	Willem van Moerkerken, João Vieira	**Landline:** 011 420 1470 **Fax:** 011 420 1463 **Cell:** 083 301 6451 or 083 680 2297	Info@robuststructure.com willem@robuststructure.com joaovieira@robuststructure.com	**Type of approval:** Agrément Certificate **Date of approval:** 1999 **Certificate no.:** 1999/272 **Certificate Holder:** Robust Structures (Pty) Ltd **Status:** Active 2016	Robust wall panels are manufactured from 0.4mm mild steel sheeting, which are punched, expanded and formed into a zig-zig profile. Panels are stiffened transversely with 2.5mm wires spot welded to each face at 200mm centres. Mortar is applied to panels either by hand or mechanical packing. Mechanically applied mortar may be applied wet (pumped) or dry (gunited), with hand-packed mortar and mechanically applied wet mixes. Both faces of core are plastered. In non-corrosive environments plaster will have a 28-day compressive strength of 10MPa, however in severely corrosive environments higher characteristic strengths may be specified.	1.Roben Jansen,Cell 083 680 2205	1.**Name of project**: Eric Molobi Housing Innovation Hub **Type of Building**: House **Physical address**: Amabokko Bokko Street, Soshanguve A, Tshwane, GAUTENG **No. of buildings**: 2 **Size of buildings**: 55m² & 112m²	**Manufacturing:** Local plant **Address:** Unit 4A & 4B, Poplar Secure Park, 16 Lancaster Road, Benoni South, South Africa, 1500 **Products manufactured:** Robust Core expanded metal w-profiled panels measuring 430mm in width to the length of wall height required with a weight of 3,55 kg/ m2.	
7	Walling and Building System	Harmili Building System	Kwikspace Modular Buildings	David van Zyl	**Landline:** 011 6178000	davidvz@kwikspace.co.za	**1.Type of approval:** Agrèment Certificate- Kwikspace Modular Building . Harmili Certificate **Date of approval:** June 2012 **Certificate no.: 2012/406** **Status:** Active 2016	The Harmili Building System is a structurally insulated panel (SIP) incorporating a strucutral steel frame designed in accordance with SANS 517. The composite insulated panels comprise a 10mm autoclaved magnesium oxide or a 9mm thick Nutec fibre cement board, encapsulating a polyruethane core. The panels for external use are 110mm thick. The panels are typcially 2.4m or 2.7m high and are 1200mm or 600mm wide. The fire rating is 30 minutes for load bearing and 60 minutes for non load bearing walls. The floor and roof system is conventional or light weight steel framing.	1. Mr Nathan Adriaanse (Director: Communications and Stakeholder Relations, NDoHS in WC), Tel 021 483 2868 (Delft Project) 2. Mr C.Myburgh (School Principal- Hamilton Primary School), Tel 012 322 656 7/8 3. M Wegerhoff (Clanwilliam Dam Project), Cell 083 631 6897, wegerhoffm@dws.gov.za	**1. Name of project:** Delft Housing Project **Type of building:** RDP/Social/Gap **Physical address:** Delft New Precinct**.** Corner Sheffield and Barka Roads, Delft, WESTERN CAPE **Coordinates:** 33°57'52.70"S 18°37'41.59"E **No. of buildings:** 1450 As this system is essentially the same as the Vela Building Solutions.	**Manufacturing:** Kwikspace **Address**: 32 Karee Kloof Road, Klipriver **Products manufactured:** All components	
8	Innovative Building System .	Modiform	Mbelengwa Civil and Mechanical Services cc	Tshililo Keneth Tshithavhana	**Landline:** **Cell:** 082 256 0020	mbelengwa@gmail.com	**Type of approval:** NHBRC approved rational design **Date of approval:** 26 August 2004 **Certificate no.:** Via Letter **Status:**	The walling system comprises a reinforced concrete panel, designed in accordance with the provisions of SABS 0100-Code of Practice for the 'Structural Use of Concrete'. Structures designed are deemed-to-satisfy the requirements of the National Building Regulations and also satisfy the requirements of the NHBRC. The walls comprise 100mm thick reinforced concrete panels, 'cast in-situ' between patented modular plastic forms using a 20MPa plasticized, air-entrained self levelling concrete. The 'Modiform Plastic Formwork' are extremely portable and are designed to clip together as formwork to form panels of the required thickness and of any size up to the limits or walls panels in SABS 0400. The final concrete surface finish is of high quality due to the smooth surface of the forms. The plastic forms can be dismantled and reused in excess of 100 times. The overall layout of the building must satisfy the requirements for lateral support of wall panels in accordance with Table 2 of SANS 10400 Section K. Walls are generally reinforced with a high tensile steel welded fabric. Door and window frames are conventional units typically used in housing throughout South Africa. The 'Modiform Plastic Shutters System' of the wall construction has a number of advantages. The most obvious is that the house can be erected in a very short space of time, by utilising local available skills, without requiring specialised equipment other than the patented formwork.	1. Ms. Lynn Garth, Cell 081 578 4724 2. Sonnyboy, Cell 082 962 5732 and Anna,Cell 082 091 5520	1. **Name of project:** Private house **Type of building:** House **Physical address**: Plot 196, Muldersdrift Boulevard, GAUTENG (From Randburg/Pretoria direction: turn left towards plot 196 - just before Misty Hills Hotel, Carnivore Drive on a dirt road for about 200m - 1st house on your right) **No. of buiildings:** 2 **Size of buildings:** 56m²	**Manufacturing:** Local plant for shuttering **Physical Address:** Shutters is Pennyware Distributors,PO Box 43225, Industria, 2042, **E-mail:** info@pennyware.net **Products manufactured:** Injection Moulded Panels 300x300 & 300x100, Wall Spacers, Mesh Spacers, Plastic Nuts, & Bolts, Steel Inner & Outer Corners, Stiffeners, Brackettry, Center Bolts & Nuts, Adjustable vertical Stays Braces, Door Frames, Window Frames, Block out Systems, Concrete Mixers, etc.	
9	Walling and Building System	Everite ABT System	Everite (Pty) Ltd	Andrew de Klerk	**Landline:** 011 439 4400 **Cell:** 082 414 1444	adeklerk@groupfive.co.za	**Type of approval:** Agrèment **Date of approval:** October 2014 **Certificate no.:** 2014/465 **Status:** Active 2016	Everite ABT Building System comprises both conventional and innovative aspects of construction. The foundations are conventional and always the responsibility of a registered professional competent engineer. The building system utilises 61 mm wide G550 gauge high tensile steel studs and tracks coated with a Z275 galvanising. The steel structure is designed and erected in accordance with SANS 517. The lipped sections are 90mm x 37mm x 8mm in dimension and rolled using 0.8 mm ISQ 550 Zinc-Alum steel. The steel framework of Everite ABT House Building System is assembled around a 90mm thick fire retarded Expanded Polystyrene (EPS) of 16kg/m3 density. The external wall panel of the building system is clad with a 12mm medium density fibre-cement board on the external face and a 15mm gypsum board is utilised to clad the internal face. The internal wall panel core is 58 mm thick and clad with 9mm medium density fibre cement boards on either sides. Party walls must be clad with 15mm gypsum boards. The external wall panels' overall dimensions are 1 200mm x 117mm x 2 400mm. The roof structure is constructed from light gauge galvanised steel trusses that is designed and erected in accordance with SANS 517 and is the responsibility of a professional registered competent engineer. The roof structure is clad with light- or heavy-weight cladding.	1.Mannie Kistnasamy, Cell 082 461 4206, Tel 011 439 4400 2. Ms Mamarake Chaotsane, Cell 078 988 8263	1. **Name of project:** NHBRC Golf Day Charity **Type of building:** House **Physical address:** Erf 20377, Matimary Drive, Thabong, Welkom, FREESTATE **No. of buiildings:** 1 **Size of buildings:** 65m²	**Manufacturing:** Local plant **Address**: Heidelberg Road Klipriver. **Products manufactured:** Wall panels , roof and sundry items	
10	Complete building system (flooring, walling and roofing)	EEZI Thermal Modular Building System	EEZI Group Africa (Pty) Ltd	Johann Dreyer; Winn Ayessaki	**Landline:** 041 583 2009 **Cell:** 082 373 6897	johann@directgroupafrica.co.za; winn@directgroupafrica.co.za	**Type of approval:** Agrèment Certificate **Date of approval:** 17 September 2015 **Certificate no.:** 2015/492 **Status:** Active 2016	The EEZI Thermal Modular Building System is a modular interlocking panelised flooring, walling and roofing system consisting of lightweight steel frame members insulated by expanded polystyrene (EPS). The system brings about significant cost savings and uses 'tried-and-tested' building materials used for decades on a worldwide basis. The uniqueness of the system comes from our patented design of being able to insert lightweight steel into our EPS panels which significantly enhances the structural strength of the steel due to the compression properties of EPS reducing the ability of the steel to flex under a given load. The system thus creates a lightweight composite panel which is aesthetically, thermally, acoustically and structurally sound.	1. Winn Ayessaki, Cell 072 9315312, Tel 041 5832009	1. **Name of project:** Vitalink Training Centre **Type of building:** Detached single dwelling **Physical address:** Marine drive, Port Elizabeth, EASTERN CAPE **No. of buiildings:** 1 **Size of buildings:** 63m² **Coordinates:** 25°35'9.83"E-Longitude and Latitude 34° 2'51.11"S	**Manufacturing:** Local plant **Address**: Marine Drive, Port Elizabeth **Products manufactured:** Wall panels manufactured locally	

11	Walling and Building System	Hydraform Building System	Hydraform Development (Pty) Ltd	Dionne Harber	**Landline:** 011 913 1449 **Cell:** 082 566 1874	dionneh@hydraform.com	**Type of approval:** Agrèment Certificate **Date of approval:** 29 April 1996 **Certificate no.:** 1996/237 **Type of approval:** NHBRC **Date of approval:** 2015/09/01 **Certificate no.:** 1-223474083 **Type of approval:** CIDB **Date of approval:** 2015/07/16 **Certificate no.:** 10070968 **Status :** Active 2016	Hydraform manufacturers the Hydraform Blockmaking machines for onsite block production of interlocking dry stacked soil-cement blocks. The system has been used to provide jobs in local communities, skills development and build a variety of needed structures such as houses, schools, clinics and hospitals. The Building system is easy to use and comprises of: · Conventional cast in-situ concrete strip foundation and surface beds or cast in situ concrete surface beds with thickened edge beams and thickenings under internal walls. · 220mm thick external walls of soil-cement blocks which are either dry-stacked or laid in horizontal mortar joints which may be reinforced, depending upon their position in the wall. · 110mm wide semi-dry stacked and reinforced internal walls. · Conventional roof construction and covering · The conventional window and door frames · Conventional gypsum plasterboard ceilings are used · Conventional services	1. Dionne Harber, Cell 082 56601874	1. **Name of project:** ABSA Housing Competition **Type of building:** Show house **Physical Address:** Stand 250, Eric Molobi Housing Innovation Hub, Soshanguve, GAUTENG **No. of buildings:** 1 **Size of building:** 55m² 2. **Name of project:** McNellie **Type of building:** Housing **Physical address:** Stand 102, Libradene, Boksburg, GAUTENG **No. of buildings:** 5 houses **Size of buildings:** 255 - 280m²	**Machine Manufacturing:** Local plant **Address:** 47 Columbine Place, Ring Rd, Industrial Park, Durban **Products manufactured:** Blocks produced on site	
12	Walling and Building System	National & Overseas Factory Built Buildings	National & Overseas Modular Construction (Pty) Ltd	Mr. Rademeyer Ferreira	**Landline:** 051 4342371 **Cell:** 083 3058897	Rademeyer Ferreira rademeyerferreira@yahoo.com	**Type of approval:** Agrèment Certificate **Date of approval:** 1984. Amended in 1989 and reassessment in 2000 **Cerificate no :**1989/191 **Status:** Active 2016	Buildings consist of a modular loadbearing steel framework, erected on a conventional strip foundation and the base rail is placed on a damp-proof course to form a steel surround into which the concrete slab is cast. External walls are clad externally with Nutec fibre-cement board and internally with Fire-stop gypsum plasterboard to form hollow walls. 50mm Aerolite is placed in the hollow walls for insulation. Internal walls are clad with gypsum plasterboard. Walls are painted with suitable undercoat and topcoat using Dulux paints. Services, ceilings and roof coverings are conventional. A professional engineer designs the foundations and surface beds.	1. N.G.Tsotetsi, Cell 058 713 6820 or 084 757 3293 2. Mr.M.Mohale, Cell 058 789 0024 or 083 245 4829 3. Mrs.M.Letsoara, Cell 058 716 2026 or 072 9529118 4. Mrs.L.Modise, Cell 058 789 1757 or 073 839 7998 5. Mrs.L.M.Matsala, Cell 058 714 1000/17 or 073 837 3579	1.**Type of Project:** Mahaig Clinic-Phutditjhaba, FREESTATE **Coordinates**: S-28,51939-E-028,80128, 2.**Type of Project**: Boiketlo Clinic-Phutditjhab, FREESTATE **Coordinates**: S-28,54971-E-028,82604 3.**Type of Project**: QholaQhwe Clinic-Phutditjhaba, FREESTATE **Coordinates**: S-28,52283-E-028,85478 4.**Type of Project**:Tshirela Clinic-Phutditjhaba, FREESTATE **Coordinates**: S-28,62298/E-028,80440 5.**Type of Project**: Bloemgumbosch Clinic-Phutditjhaba, FREESTATE **Coordinates**:S-28,48241-E-028,84902	**Manufacturing:** Local plant **Address**: 236 Church street, Hamilton, Bloemfontein, 9301 **Products manufactured:** Structural steel, window and doot frames. Wall panels manufactured locally.	
13	Complete Prefabricated Building System	RIC Prefabricated Building System	Rodger Ian Carter Technical Services cc	Rodger Carter	**Landline:** 021 401 8856 **Cell:** 083 327 7338	rodger@ricts.co.za	**Type of approval:** Agrément Certificate **Date of approval:** July 2014 **Certificate no.:** 2014/458 **Status:** Not Active	The floor structure consists of Hot Dip Galvanized steel chassis on adjustable feet on concrete slabs. Semi-flexible vinyl floor tiles to SANS 581 on 21.0mm waterproof Shutter Ply Floor Boards (Treated with insecticide and fungicide). The wall panels are 40mm or 60mm Chromadek EPS panel Tung & Groove system with 0.5mm ribbed Chromadek exterior skin and 0.5mm plain Chromadek interior skin; colour - frost white. The roof panels comprise of 0.53mm galvanised IBR roof sheet exterior skin, 58mm EPS core insulation, 0.5mm Chromadek internal skin. Minimum floor to ceiling height: 2500mm. Aluminium top-hung windows are used fitted with 6.38mm safety glass. Burglar Bars are fixed to all window openings. The internal and external doors are provided with weather bar on the external face of door. All work to SABS standards and conform to National Building Regulations and Local Authority by-laws.	Hermann Lohann,Cell 021 401 8856 or 079 517 1825	**1. Name of project:** AZ Berman School **Type of building:**Classrooms, Admin Unit & Ablutions **Physical address:** AZ Berman School - Spine Rd, Strandfontein, Mitchell's Plain, Cape Town, WESTERN CAPE **No. of buildings:**18 Classrooms,1 Admin Unit, 2 Ablutions **Size of buildings:** Various **2. Name of project:** Sonieke High School **Type of building:** Classroom **Physical Address:** Kerk Street, Kuils River, Cape Town, WESTERN CAPE **No.of Building:**10 Classroom **Size of Buidling:** Various	**Manufacturing:** Local Plant **Address**: South Arm Road, Duncan Dock, D Berth, Cape Town Harbour **Products manufactured:** Steel Floor Structure, Wall Panels, Roof Panels, Aluminium Windows and Doors, Security Gates and Stone Guards	
14	Walling and Building System	Legna Solidwall Building System	Legna Creative Enterprises cc	Reggie Mazubane	**Landline:** 031 653 1371 **Cell:** 082 302 8929	reggie@legnacreative.co.za	**Type of approval:** Agrèment Certificate **Date of approval:** 2 August 2014 **Certificate no.:** 2014/456 **Status:** Active 2016	The system is a lightweight steel construction method that has been improved. Instead of fibre cenment boards on both internal and external walls, the Legna Solidwall Building System uses a 10mm Magnesium board on the inside and the joints are skimmed. Tylon Key-it is apllied to the inside of the board for the concrete to adhere to it. The 90mm C section is then hand packed with a 20MPA concrete mix which is 70% river sand and 30% plaster sand. The plaster consist of Pratley Perlite Thermal plaster and cement mixed to the manufacturers specifications to give a 14 MPA strength. This also provides the insulation properties required. The walls are then plaster primed and given two coats of high grade paint finish.	Reggie Mazubane, Cell 082 302 8929	**1. Name of project:** Legna Charity Project **Type of building:** House **Physical address:** Inanda, Durban, KZN **No. of buildings:** 1 **Size of buildings:** 75m²	**Manufacturing:** Local plant **Address**: Unit 106, Ensor Industrial Park, Durban, 4051 **Products manufactured:** Wall panels manufactured locally	
15	Ventilated Raft Foundation	Geoplast Foundation	Geoplast South Africa Pty Ltd	Attilio Angelucci/Andrea Martini	**Landline:** 021 556 8488 **Cell:** 082 304 4444	attilio@geoplast.co.za/info@geoplast.co	**Type of approval:** Agrèment Certificate **Certificate number:** 2015/485 **Date of approval:** September 2015 **Status:** Active 2016	MODULO is a disposable formwork for the construction of ventilated crawl spaces which physically separate the building from the ground. When properly ventilated, crawl spaces allow the elimination of rising damp and Radon Gas. Radon Gas is a radioactive gas and it is the second cause of lung cancer after cigarettes smoke. The solution is a ventilated foundation that permits the natural flow of Radon Gas outside the building without accumulating inside the rooms.	1.Attilio Angelucci, Cell 082 304 4444 2.Adriano Angelucci, Cell 082 7237186	**1. Name of project:** Crawford Estate **Type of building:** Gap housing **Physical address:** Kimberley, NORTHERN CAPE **No. of buiildings:** 109 **Size of buildings:** 7630m² Other African countries	**Manufacturing:**Imported **Address**:Potsdam Road, Potsdam, Cape Town (Products manufactured: imported)	

16	Walling and Building System	Khaya Readykit Building System	Readykit Cape (Pty) Ltd	Mike Hill	**Landline:** 021 510 2233 **Cell:** 082 4036929	readykit@mweb.co.za	**Type of Approval** :Agrèment **Certicate Number**: 2012/426 NHBRC approved and technically updated. Rational design per HMG Structural Engineers. **Date of approval:** 16 June 2012 **Status:** Active 2016	Timber panels of three optional heights and generally 500mm, 1m and 1.5m wide, and either 76mm or 114mm thick. Fibreglass mesh is fixed over a single reflective non woven membrane onto these panels so as to produce a thermally effective cavity wall. Electrical and plumbing connections are inserted into the panels. On site, panels are fixed to a conventional raft with steel arrow brackets which had been inserted into the still soft concrete. Any roofing can be used, however, in the case of a double-pitched roof the option of timber trusses are preferred. This system is mainly used for housing but has been used in a variety of larger buildings. The system has a 60 minute fire rating, is waterproof, durable, bullet resistant, earthquake resistent and employs easily transferable basic skills.	1.Solly Suleman, Cell 071 754 4257/031 563 0524	**1. Name of project:** School Project **Type of building:** A block of School **Physical address:** 225 Blair Atholl Road, westville, Durban, KZN **No. of buiildings:** 1000 Houses **Size of buildings:** 50m **2. Name of project:** Department of Human Settlements Project **Type of Building:** Gap houses **Physical address:** Scottsdene, Cape Town, WESTERN CAPE, Verde Ext:3634 **No. of buildings:** 6 Houses **Size of buildings:** 50m²	**Manufacturing:** Factory in Vrede and Somerset West **Address:**Readykit Cape (Pty) Ltd,P.O. Box 393, Somerset West, 7129 The secret lies in our patented cavity wall system by which an acrylic resin cured fibreglass mesh is attached to each face of the frame. When plastered the timber performs merely a structural role, with a lime/cement plaster on each face providing the insulation and finish.	
17	Walling and Building System	Benex Masonry Building System	Benex Cape (Pty) Ltd	Tony Marsh	**Landline:** 021 534 0707 **Cell:** 082 338 6970	tony@benexcape.co.za	**Type of approval:** Agrèment Certificate **Certificate number:** 2014/471 **Date of approval:** November 2014 **Status:** Active 2016	The Benex Masonry Wall System; Comprises lightweight intelockingmasonry blocks. 1,5 times bigger (600mmx200mmx200mm) than a standard 190mmCMU but 3-4Kg lighter (13,5kg). A Benex wall has a thermal insulation R-value (0,52) equal to a cavity clay brick wall. Without a real loss of thermal mass Benex walls have a 1 hour fire rating (4 hours in Australia). It has good acoustic performance (Rw 37;C;Ctr -1;-3) without core filling. A Benex wall is impervious to water without plaster or paint (Even in the SCCCA). Can replace most current forms of wall construction. It has the integrity of masonry and wokability of timber. Walls can be built plumb and straight by unskilled workers as fast as skilled bricklayers after a brief training. The Blocks are laid with a thin-bed mortar (1-2mm). The Benex Panel System can be used for internal walls and floors.	1. Tony Marsh, Cell 082 338 6970 2. Dave Carstens, Cell 082 4955016 3. Shaheem Kader, Cell 083 6027767	1.**Name of project:** Greenville Housing **Type of building:** BNG low-income **Physical address:** Fisantekraal, outside Durbanville, Lordswalk Road (on hill), Cape Town, WESTERN CAPE **No. of buiildings:** 3000-5000 (Now completed +-700) **Size of buildings:** 42m²	**Manufacturing:** Local plant **Address**: 81 Bofors Circle, Epping Industria 2	
18	Walling and Building System+B20:B22	Ikhaya Futurehouse Systems	Ikhaya Futurehouse Systems Manufacturing (Pty) Ltd	Claudio Rossi	**Cell:** 076 173 4804	claudio@futurehouse.co.za	**Type of Approval:** Agrément Certificate **Certificate Number:** Certificate 2007/331 **Date Of Approval:** 2008/347 for double storey **Status:** Active 2016	The Ikhaya Futurehouse System (IFHS) is a panellised, quick to build, lightweight and thermally insulating walling system. It offers superior structural integrity to traditional methods of construction while addressing energy efficiency.	1. Jacque Scherman, Cell 082 770 3027 or jacque@futurehouse.co.za 2. Roscoe Hall, Cell 082 773 4133 or roscoe@futurehouse.co.za	**1.Name of project:** Eric Molobi Housing Innovation Hub **Type of building:** Affordable Housing **Physical address:** Erf 256, Juventos Street, Soshanguve, GAUTENG **No. of buiildings:** 1 **Size of buildings:** 65m²	**Manufacturing:** Local plant **Address:** Ikhaya Futurehouse Systems, 14 Marconi Nook, Hennopspark ext 15, Centurion, Gauteng, 0157	
19	Walling and Building system	UkuZwana Building Systems	UkuZwana Project Management Solutions	Thomas Swana	**Landline:** 021 797 5905 **Cell:** 083 273 6091	tlswana@ukuzwana.com	**Type of approval:** Agrèment **Certificate number:** 2013/445 **Date of approval:** November 2013 **Status:** Active 2016	The system utilises Neopor Cellular Lightweight Concrete and either cast in situ or pre-cast in a factory. The concrete produced can be adjusted to 18 MPa but produces 4 times the coefficient of thermal conductivity to that of conventional concrete at one third the weight at 1600 Kg/m3. The strength can be reduced to improve thermal insulation even more. The system can be applied for any construction purpose including resdential, commercial and industrial buildings. Using the system reduces costs and vastly improves quality compared to conventional construction methods. The system is Agrement approved and meets all Agrement requirements and standards.	1. Thomas Swana, Cell 083 273 6091 2. Walter Botes, Cell 082 491 0875	1.**Name of project:** Cape Concrete two storey flat **Type of building:** Gap housing **Physical address: no 1 wimbeldon road** Blackheath, Cape Town, WESTERN CAPE **No. of buiildings:** 1 **Size of buildings:** 104m² **2. Name of project: S**taff facility and ablution **Type of building:** Changing rooms, toilets, canteen **Physical address:** Vissershoek landfill site, north of milnerton, opposite Vanschoordrifs Road on N7, WESTERN CAPE **No. of buiildings:** 1 **Size of buildings:** 85m²	**Manufacturing:** Cape Concrete Works, Wimbledon Road, Blackheath, Cape Town	

20	Affordable Housing	MOLADI	MCS Technologies CC	Shevaughn Botes	**Landline:** 041 379 2600 **Cell:** 084 625 2076	shevaughn@moladi.co.za	**Type of approval:** Agrement **Certificate Number:** 94/231 (MOLADICHEM) **Date of approval:** Unknown **Status:** Active **Type of approval:** NHBRC Rational Design **Date of approval:** June 2006	The moladi system involves the use of a unique removable reusable recyclable and lightweight plastic formwork mould which is temporarily erected and filled with an aerated mortar to form the monolithic wall structure of a house in-situ on site. The process involves the assembly of a temporary plastic formwork mould the size of the designed house with all the electrical services plumbing and steel reinforcing located within the wall structure which is then filled with a specialised laboratory approved mortar mix to form all the walls of the house simultaneously. The formwork is removed the following day (after 15 hours) and re-erected on the next foundation.	Hennie Botes, Cell 084 657 4028	1.**Name of project:** Eric Molobi Innovation Hub **Type of building:** Subsidy housing **Physical address:** Soshanguve, GAUTENG **No. of buildings:** 1 **Size of buildings:** 52 m² **2. Name of project:** Benoni Small Farms **Type of building:** Residential Home **Physical address:** Cnr. Estate and Jurger Rd, 27 Jurger Rd, Benoni, GAUTENG **No. of buiildings:** 1 **Size of buildings:** 80 m² **3. Name of project:** Hillwood Primary School **Type of building:** School **Physical address:** Lavender Hill, Grassy Park Cape Town, WESTERN CAPE **No. of buildings:** 1 Size of buildings:	**Manufacturing:** Local plant **Address**:2389 Upper Seaview Rd, Chelsea, Port Elizabeth	
21	Walling and Building System	Uvuyo Building System	Uvuyo Trading 109 (Pty) Ltd	Jannie Coetzee	**Landline:** 021 981 4641 **Cell:** 061 990 4162	jannie@uvuyogroup.co.za	**Type of approval:** Agrement Certificate **Certificate number:** 432/2013 **Date of approval:** 13 November 2012 **Status:** Active 2016	The system was developed in sequence with the Howic roll forming technology allowing a C-sectional steel profile of 89 mm x 41.3 mm x 75 mm manufactured in a cold rolled process and extruded in a continuous method to specifications. The frame structure is designed with the only approved product software, Virtex, and approved by the Uvuyo Group enginering team for manufacturing. Manufacturing is done in Johannesburg in accordance with the design and transported to the site. On site the assembly takes place under strict guidance of the QMT (Quality Management Team) and approved by the site engeneer once ercted. The Uvuyo Buiding System is either insulated with Isotherm or with the approved Light Weight Concrete mix approved by the soil lab for infill mixtures. The fondations will be evaluated depending on the concitions on site. Soil testing and compalction Mod ASH results will determine the required foundation. Our site engineer will approve the required design for the application. Uvuyo Group manages the Quality Managment System and constantly changes areas of consern with the required testing and approval from our engineering team.	1. Jannie Coetzee, Cell 061 990 4162 2. Christo Coetzee, Cell 082 576 3499 3. Jan Coetzee, Cell 084 520 9192 4. Sonika Coetzee, Cell 061 922 0865	**1. Name of project:** Willovale SSS **Type of building:** School **Physical address**: Willowvale, EASTERN CAPE **No. of buildings**: 2 **Size of buildings**: 3890m² **2. Name of project:** Nduku, JSS **Type of building:** School **Physical address:** Dwesa, Willovale, EC **No. of buiildings:** 2 **Size of buildings:** 3560m² **3. Name of project:** Nomkolokoto JS **Type of building:** School **Physical address:** Mt Frere, EC **No. of buiildings:** 3 **Size of buildings:** 3999m²	**Manufacturing:** Gauteng and Cape Town **Address**:Unit 8, Schooner Street, Lazer Park, Honeydew, Johannesburg **Products manufactured:** All in SA	
22	Walling and Building System	Izoblok Building System	Aveng Infraset a business unit of Aveng	Mike Nkosi, a consultant acting on behalf of owner	**Cell:** 079 1108426 or 083 2897334	mike@sandstormwt.co.za	**Type of approval:** Agrement Certified **Date of approval:** 22 October 2008 **Certificate no.:** 2008/348	The wood/cement blocks are manufactured in the Czech Republic in compliance with Austrian Specification ONORM B 3208. The typical block sizes are 1000mm long x 250mm high x 200 mm wide (minimum) for exterior walls and 1000mm x 250mm x 150mm for interior walls. The blocks are manufactured with a mixture of wood chips and ordinary cement. The system uses ordinary foundations and the surface beds immediately below all walls are provided with a damp proofing course in a conventional manner. The blocks are laid in stretcher bond, four courses at a time, and filled with 15 MPa concrete. Precast or in-situ lintels are used. In case of in-situ then reinforcing steel bars are placed into the block rebates. The walls are then plastered and painted.	1. Mike Nkosi, Cell 079 110 8426 or 083 289 7334 (Paulina Samson is owner of house on erf 11534 in Wellington)	1. **Name of project:** ABSA International Innovative Housing Competition **Type of building:** Social Housing **Physical address:** Erf: 2220, Stand no: 11 534, between May Avenue (area entrance) and Sand Street, Mbekweni, Wellington, Noodkamp, WESTERN CAPE **No. of buildings:** 1 **Size of buildings:** 60m²	**Manufacturing: None yet, Waiting for market interest** **Products manufactured: Blocks for demo structures imported from Czech Republic, but if viable market interest exists a manufacturing plant would be set up.**	
23	Walling and Building System	Compressed Earth Block Building System	Use-it	Chris Whyte (CEO) Didier d'Hotman (PM)	**Landline:** 031 765 2349 **Cell:** 082 415 8138 or 072 292 0240	ChrisWhyte@use-it.co.za didier.use.it	**Type of approval:**Agrèment **Date of approval:** July 2011 **Certificate no.:** 2011/397 **Status:** Active 2016	The Compressed Earth Block Building System follow the conventional building methodology as blocks and bricks. The block are manufactured from clay bearing soil, compressed at high pressure using a hydraulic equipment and stabilised with cement. The blocks are bonded using a slurry mix instead of the conventional mortar mix. The slurry consists of refine soil, water and cement. The walls can be plastered and painted or protected with a recommended breathable coating system. The blocks are manufactured in the following sizes 356 x 256 x 87mm, 356 x 180 x 87mm and 356 x 140 x 87mm.	1. Chris Whyte, 031 765 2349 or 082 415 8138	**1. Name of project:** Swallows Nest **Type of building:** Demo low-income housing **Physical address:** 110 Stockville Road, Marianhill, Giba Gorge, Marianhill, KZN **No. of buildings:** 1 **Size of buildings:** 52m² **2. Name of project:** Ethekwini Alternative Housing Tender **Type of building:** Low income housing **Physical address:** 140401 Utuzuma Unit E, KZN **GPS:** S29° 43.556' E030° 55.393' **No. of buildings**: 1 **Size of buildings:** 42m²	**Manufacturing:** Local plant **Address:** 110 Stockville Road, Giba Industrial, KZN	
24	Walling and Building system	Polystructures	Polyform International	Wolf Binder	**Landline:**033 342 2909 **Cell:** 078 457 7002 or 074 136 7086	wolf.binder@polyform.co.za	**Type of approval:** Agrèment **Certificate number:** 2015/488 **Date of approval:** 5 November 2015	The Polystructure homes are patented using a combination of reinforced concrete and polystyrene panels which are easily manufactured and erected on site. Fully insulated, water and wind tight, the Polystructure is ideal for all low cost housing providing job opportunities and training to the communities. The Polystructures are also a proudly South African product and all materials used is locally manufactured.This system provides single or double storey options of any style.	1. Wolf Binder PrEng, Cell 078 457 7002 2. Denise Govender PA, Cell 079 307 4819 3. Kavilan Sigamoney, Cell 084 500 0199 (Jhb)	**1. Name of project:** Old Polyform Mobile Offices **Type of building:** Mobile Polystructures **Physical address:**101 New England Rd, Pietermaritzburg, KZN **No. of buiildings:** 5 units of which 3 are semi-detached **Size of buildings**:50 m² **2. Name of project:** New Polyform Mobile Offices **Type of building:** Mobile Polystructures **Physical address:** 5 Cannought Road, Scottsville, Pietermaritzburg, KZN **No. of buiildings: 1** **Size of buildings**: 50 m²	To be confirmed	

Scores below 80% (A grade) means that the specific IBT house is not in a good condition