Marking guidance

For Inspectors, Inspection Managers and Judges

NHBC Pride in the Job Awards

The following notes are to be used as guidance when marking individual score lines within the PiJ App. They are intended as an expansion of the brief description of the element of work to be marked. They are not intended as a checklist or to exclude other aspects of the work to be marked.

The score lines and scores awarded are to reflect the site manager's ability to manage, interpret design and construction details, and implement procedures – whether those of the builder or as required by legislation or standard-setting bodies.

Who is the site manager?

In the context of the PIJ competition, the term 'site manager' refers to the person who has been identified as the leader of the whole site team, and who has overall responsibility for the quality of work and ethos on the site. The title of this person may vary from site to site (i.e. site manager, project manager or, on a particularly large site, project director). Generally, it is not considered appropriate for persons managing several sites, such as contracts/ build managers or construction/production directors, to be nominated. Where there is any doubt about the status of a person under consideration, the Inspection Manager or Regional Director should be consulted.

Level of pride in the work

Focus for the marking should be directed towards the level of pride taken in the element of work being carried out by that trade and, therefore, being managed by the site manager. Marks are awarded on a six-point scale with 4 being work that simply complies with NHBC Standards and Building Regulations. Marks can be lost by a score line that falls short of the descriptors within the opening paragraph or where there are breaches of the standards and repair or rectification work is required. In that case, the mark given will depend on the severity and repetition of the substandard work. Marks can be gained where the quality of the work or its accuracy is above that seen on an average site; a 6 can be awarded where there is genuinely no further room for improvement.

For guidance, each score line has a second paragraph under the heading 'Pride', with some suggested areas where extra attention to detail may demonstrate that pride is being taken, which in turn may lead to enhanced scores. However, this is not exclusive and does not form a checklist for the marking process. Other factors – in particular, consistency across different plots – are important and must be considered to ensure that the specific area of work has been wholly and fairly assessed. The PIJ marking process must be transparent for feedback to the site manager and construction trades. In all cases, it must be assumed that comments accompanying scores might be made available as feedback and, therefore, the presentation and nature of comments should reflect this whilst being honest and accurate.

Sufficient notes for substantiation

It is important that sufficient notes are made on the marking sheet to substantiate the decisions made, as this will form part of the constructive feedback process to the site manager being assessed. Additional notes should be added to 'Summary' box on the site information page in the PiJ App to form a pen picture of the manager and give any other information about the site to support the nomination.

Where non-conventional construction is being used, attention should be given to its correct use within the context of the overall project. The most appropriate score lines for such elements should be used.

New build

1. Foundations

Ground preparation, excavations & piling - consider environmental factors and whether site remediation (where required) has been carried out in a correct and responsible manner. Records of tree removals are important on sites with cohesive soils. The management of ground improvement and dewatering operations should be considered. For structures built entirely off rafts, consider the formation of the subbase materials, which should be free of any hard or soft spots. The temporary retention of soil, in preparation for basement construction, is important. Check that the site manager being scored has been responsible for the site at this stage (rather than a principal contractor).

For foundation excavations (whether strip, trench fill, beams, pads rafts or basement), the verticality of the sides, correct depth, step formations, placement of heave protection material (where required) and levels of adjacent foundations or drainage should all be considered. The formation should be accurate at the base level. It should be free from debris. or loose material and clear of excess water before the concrete is poured. Although they are generally specialist subcontractors, piled foundation installers still must be managed well. The relative position of any piles to the foundation pad or ground beam must be checked, and installation of pile reinforcement carried out correctly. Pile installation logs and test results should be checked, queried as necessary and made available on request. The pile heads should be trimmed to expose sound concrete with the correct penetration of 50mm to 75mm into the pad or beam. Pile reinforcement should protrude to provide adequate laps into ground beam or pad reinforcement.

Pride – quality and care taken with the storage of soil with emphasis on isolating possibly contaminated spoil heaps. Knowledge and understanding of the preparation work so that the quality of specialist subcontractors can be better monitored. Tidiness of the site during these works shows a certain attitude and sets out the stall for the rest of the construction. Again, a knowledge and interest in these works exhibited by the site manager demonstrates the ability to control proceedings.

Reinforcement, formwork & concrete placement – the concrete should be of the appropriate mix and, where designed reinforcement is included, properly vibrated. The reinforcement should be of the correct size and position, with proper laps and spacers to ensure adequate cover. Any construction joints should comply with NHBC Standards Chapters 4.3 and 4.4. Immediately prior to concrete pour, the base and sides of the cage enclosure should be clean and free from deleterious material. The concrete should be of the appropriate mix (usually of a high strength and low slump) and, where reinforcement is included, properly poker vibrated to remove the air and achieve the design strength. It should not be dropped from a height but placed in the excavation or shutter by chute, skip or pump without overspill. The line and level can be checked when the substructure walls are in place. Where the foundation is correct, the projection will be adequate and approximately equal either side of the wall (unless proven to be designed otherwise). Corners are particularly vulnerable to inaccuracy. Where the foundation is level, there will not be a need for brick and block cutting to achieve a horizontal bed joint.

Pride – attention to detail of concrete placement in readiness for the masonry or frame, leaving a smooth, level surface. Accuracy, squareness, cleanliness and the build quality of both the concrete and the steel reinforcement cages. Care taken with the setting up of cages within the trench and the support system. Particular attention given to cleanliness of working areas around the foundation sides.

2. Substructure and drainage

Walls & columns – this score line should include any construction below ground or at basement level and is likely to be of masonry, reinforced concrete or a combination of both. Structural steel elements may also be present. For masonry, the filling of joints, cutting, tying and bonding are all important for this load-bearing element. Internal substructure walling must be built to permit adequate airflow through the substructure void where required. For reinforced concrete elements, consider reinforcement placement, care taken in the concrete pour, the quality of formed concrete and the neatness of joints at kickers and junctions. In steel columns, the correct use of holding down bolts and packing pieces is essential. The method of providing for service entries through the walls should be considered.

Pride – uniformity and jointing of masonry with neat, fully filled joints, even where they will be hidden by ground levels. Well thought-out bonding of cross walls to external walls. Careful, well set out installation and positioning of ties and structural components, where applicable. Consistency, neatness and accuracy of service holes within substructure and basement walls. In basements, smoothness of concrete finish (especially where it is to remain unclad), little or no honeycombing, and absence of staining to walls indicating leakages. Look for a well-designed and operated system of ensuring that correct steel holding down and connection bolt tightening is being undertaken.

Waterproofing & ventilation – DPCs should be continuous and over the full width of the brick or block to prevent moisture penetration. They must be correctly located when surface rafts are used. Tanking must be applied in accordance with the manufacturer's instructions, with attention paid to laps, corners and fillets. It should lap with DPCs and other membranes to form a continuous envelope. Penetrations through the tanking or other membranes should be correctly designed and formed. Where sub-floor vents are installed, they should be adequate in number and location and have a stop ended dpc tray over them. They should not be positioned where the airflow is likely to be obstructed by the subsequent construction of paths, steps or fall pipes, nor be subjected to point loads. Vent pieces should not be damaged by subsequent work, and trunking pieces should remain connected. Internal substructure walling must be built to permit adequate airflow through the substructure void. Cavity trays should be provided over the ventilators.

Pride – particular care taken in the positioning and retaining in position of DPCs, tanking, DPMs and vents. Systems in place to prevent damage or blockages during build. Cleanliness and preparation of construction joints is particularly important, and good work in this area should be suitably recognised, as should the designing of controls for the application of tanking to basement walls and the interface with the superstructure. Evidence that planning of ventilation positions has taken place – for example where they might otherwise cause a problem with Part M access paths, steps and ramps.

Subfloor services & service entries – all services through the ground floor should be correctly positioned, appropriately insulated and properly supported. They should include temporary protection, i.e. caps to prevent blockage during construction. Hangers or brackets may be used in basements, which should be properly fixed to provide adequate support. Sufficient under-floor void space for ventilation and/or soil heave protection must be maintained. Floor drainage channels should be correctly positioned. Where passive ventilators are installed, they should be adequate in number and location, and should not be positioned where the airflow is likely to be obstructed.

Pride – consideration of finished levels for correct depth of services installation, suitable falls where appropriate and proper long-term support, sealing and marking to prevent blockages and provide clear indications of positions and type. Neatness of suspended services layouts enhancing the quality of the finished product. The neatness of the finish around service entry holes in the floor slab (both above and below) should be recognised. Provision of temporary drainage to ground floor slab above basements will protect the basement construction and any materials stored within.

Ground floor – the type, compaction and depth of the backfill, including trenches, are all to be considered, particularly where offering support to the ground floor. Where a beam and block floor is installed, the grouting should be adequate to prevent movement of the blocks and carried out at an appropriately early stage. Suspended slabs must be fully supported at the bearings. Where the ground floor is to accept timber or steel frame construction (or other modular build systems), the level of the floor is especially important. Packing of plates below the frame should be in accordance with NHBC Standards. The floor should have a finish appropriate to the subsequent flooring coverings. The actual surface finish of the floor is marked under the Floor finishes section. Basement floor slabs must be appropriately formed to allow adequate drainage to gullies.

Pride – particular care taken at floor to wall interfaces and the associated tanking and DPM details. The quality of the finish, whether it is to receive a topping or not, should be considered. Consider the timing and quality of grouting to beam and block floors.

Drainage (internal & external) – all underground drainage, (including septic tanks, pumping stations etc.), the support, line, levels, terminals and access chambers are to be assessed. The bedding must be of the correct size and type for the pipes being laid. All access points should have openings sealed during the construction process to avoid damage and entry of materials. Excessively tight bends are to be avoided.

Pride – thought applied to the setting out accuracy of the drainage setting out to avoid stud walls internally and for manholes to be placed externally as appropriate (avoiding awkward landscape or footpath details). Consideration should be given to the quality of support, bedding and surround to drains, and the correct provision for access should be evidenced. Efficient excavation (being just wide enough to receive the drainage and bedding) will also be recognised here.

Gas precautions – the DPM should be linked to the DPC. Where the DPM is to prevent methane or radon gas from entering the building, all laps must be sealed. Quality of sealing around services and other penetrations is very important.

Pride – neatness of detail and precision in laying DPMs where they create a barrier to gases. Neatness of detailing around services ducts. Site manager knowledge of the importance of this detailing is a good sign. Evidence of precautions to avoid damage can be seen.

3. Superstructure

Structural frame & load-bearing walls – the jointing and cutting of blockwork or timber frame, the forming of openings or features, the building in and around floor joists or beam support positions, and the blocking in between, are all considered under this heading. Separating walls should receive particular attention to avoid sound transmittance. In timber frame construction (where special fixing methods may be employed), the position of the wall studs and the fixing of the panels should all be considered. Construction of masonry within height limitations of the product during build is important. In framed structures, all bolts should be of the correct grade, tightened with a torque wrench and the correct length to ensure the thread is visible beyond the head of the nut. Site cutting should be avoided but, where necessary, must be to the frame designer's specification. All base plates should be fully grouted up after the holding down bolts are completely tightened. Packs or shims must be of similar grade steel. In concrete frames, the reinforcement is generally increased at the beam and column connection, and the concrete must be fully vibrated for in-situ construction. Reinforcement laps and general placement must be in strict accordance with the design. Piers and posts must be in designer-specified locations. Precautions against disproportionate collapse – whatever the system of build – must be correctly installed.

Pride – accuracy of work in general and an understanding of the structural principles by the site manager may gain marks. In framed construction, the design and application of effective checking systems for connections will demonstrate an appreciation of the challenges involved. Neatness of the build process and any control systems in place will be considered.

External envelope (inc. chimneys & flues) – the quality of the workmanship is the main issue, which, for brickwork, should include bonding, gauge, well-filled joints to prevent excessive water penetration etc. The visual impact of the construction is important. The bricklayer's attention to detail and any features (such as arches) should complement the construction. Correctly positioned and formed movement joints, including sealant, should also be marked under this heading. External lintels and shelf angles, including their protection and fixings, should be considered as part of the external fabric. Preformed feature panels within cladding systems and their fixings should also be considered. The installation of cladding should precisely follow manufacturer's instructions and the requirements of any third-party certification (e.g BBA Certificates). Flue blocks or liners must be installed the correct way up relative to their class and should be bonded in or supported for their full height. Appropriate jointing materials should be used. There should be an appropriate construction of cavities around flues where applicable. The use of flashings in the external chimney construction should be appropriate. Neat and correct installation of 'dummy' chimneys, including adequate structural support and fire stopping, is important.

Pride – maintaining vertical perpend joints on masonry, accuracy of work in general, and quality of joints and bonding (especially at internal corners). Care of work in progress to avoid the necessity for excess cleaning and potential damage to facework. Correct application and thought applied to structural joints. Accurate execution of setting out and jointing (particularly at interfaces and lintels, windows and in floor structures). Early anticipation of architectural problems indicates a heightened level of skill, even where most of the work is being carried out by specialists. Particular care in the work described above to produce a quality gas-tight installation. Neatness of chimney flashings. Evidence of a quality control system such as a testing date on the chimney. The visual impact of the construction can also enhance the score.

Cavities, insulation & soundproofing – cavity wall tie positions, type, number, spacing and cleanliness are important for stability and the prevention of water penetration. All perpends and joints within the cavity should be full and neatly struck off. The insulation should be of the correct type and thickness for the location of the building. It should be properly restrained and continuous to prevent cold spots. No cases of cold bridging through the external wall construction should be observed. There should be no mortar droppings between full fill cavity insulation pieces. Cavities should attain, and keep consistent, the minimum specified width. Vented cavities to cladding systems should be constructed according to the manufacturer's design.

Pride – high standard of detailing, accuracy, alignment and cleanliness of wall ties, DPC trays and weep vents. Insulation should be noticeably clear of debris through the use of protective measures during subsequent wall construction.

DPCs & trays – DPC trays should be installed at correct levels with stop ends and correctly positioned weep holes. Vertical DPCs should be tucked into the inner leaf bed joint below the lintel and extend below the sill into the cavity. Stepped trays are to be carefully set out using profiles. Vertical DPCs should be used to separate internal and external masonry, for example at pitched roofs over bay windows.

Pride – high standard of detailing, accuracy, alignment and cleanliness of DPC trays and weep vents. Correct and consistent location and spacing of weep holes, with clean openings and neat pointing around them, may gain extra marks.

Intermediate floor structure – this refers to the structural floor, whether timber, steel or pre-cast or in-situ concrete. All required straps, noggins, strutting and associated Z clips should be fixed in position. Proprietary floors must be installed in accordance with the manufacturer's design. Correct wall interfaces must be used (hangers or building in of joists and beams). The quality of workmanship is vital for this element of construction, particularly separating walls, to avoid sound transmittance. Consideration must be given to any special fixing details to the main frame beams and columns. Precautions against disproportionate collapse – whatever the system of build – must be correctly installed.

Pride – particularly well-formed and consistent, debris-free edge gaps to timber floor decks, neatly cut and filled details where joists bear onto load-bearing walls. Well-formed bearings for concrete floor members, taking account of any cambers or service cut outs. Well prepared structural surface to enable a good finish to be applied.

Lintels, beams & other structural elements – the correct length and bedding of lintel bearings are important to ensure full distribution of the load. Padstones should be of the required size and positioned centrally below the beam or lintel, unless otherwise designed. In blockwork walls, full blocks should be used for lintel bearings with correctly bonded blocks below. Girder truss bearings are also considered under this heading. Mild steel beams should be painted to ensure durability in accordance with NHBC Standards 6.5.3. Double steel beams should be firmly bolted together before being loaded by superstructure above.

Pride – care in setting out, bedding components and jointing where required. Consistent avoidance of straight joints around bearings. Planning of coursing so that lintels over doorways are installed at an appropriate height without excessive gaps to door linings. Evidence of a quality control system for ensuring any bolts have been tightened up.

Balconies, including fixings & weather proofing – balconies must be accurately aligned, installed and correctly fixed back to the main frame. Look for correct balcony guarding and gaps. Correct drainage for the balcony design is most important and should match approved drawings and meet NHBC minimum requirements. Adequate sealing of fixings where they penetrate the weatherproof fabric is vital.

Pride – care taken to make these distinctive structures look aesthetically pleasing, whatever the design. Neat details around fixings to main superstructure elements. Careful consideration of the provision and maintenance of balcony drainage and overflow systems. Efforts made to create a pleasing appearance to soffits and decking.

Fire stopping (Superstructure) – the correct installation of fire-resisting materials to walls and compartments are important to achieve their required performance standards.

Pride – care taken to ensure that products are installed accurately and precisely to meet their performance capabilities. A carefully designed checking and signing-off system implemented on site. Catalogued photographic records of fire-stopping prior to covering up.

4. Roofs

Framing (including dummy chimneys) – all types of roof construction are included in the score line, whether the roof is flat or pitched, timber, concrete or other material. In timber pitched roofs, connections at the wall plate position shall be considered. Restraint straps must be correctly positioned and fixed to the roof members. The diagonal bracing should extend from the wall plate to the highest longitudinal brace. The longitudinal bracing should be tight against gable walls. Chevron bracing is usually required to truss rafters when the span is greater than eight metres. All hangers supporting rafters at girder truss positions must be fully nailed and each ply of the girder truss is to be fully fixed together. Appropriate thought should be given to connections in steel and concrete framed roofs. Similar basic principles for bracing applies to all types of roof construction, i.e. the bracing should transfer the wind load to other elements designed to resist these forces. When installing dummy chimneys, it is essential to check that they have been fixed in accordance with manufacturers installation guidelines for structural stability and in cases where fire stopping materials are required.

Pride – care taken with both construction of the frame and bracing it for stability, accuracy of cutting, where applicable, and fixing of cut members, general fixing of components and their connection to the structure. Neatness of valley support construction. Good support for diminishing trusses that recognises the bearing angle of the supporting rafters and proper support for flying ends. Attention given to the stability of hip members with good connection detailing. An enhanced understanding by the site manager of the fixing of components and their connections to the structure.

Pitched roof coverings – all felts should have the correct laps and batten sizes, cut and fixed to comply with NHBC Standards. Attention to detail at hips, verges, ridges and valleys should be considered. The correct mix should be used in the mortar for bedding slate and tiles, and be of a uniform colour, where specified. Valley tiles to be cut correctly, and not whilst in situ, to reduce risk of damage to the underlying weatherproofing construction. Dry verge, ridge and valley systems to be correctly fixed.

Pride – quality of the detailing and fixing of the above, use of the correct components, neatly installed where the solar panels are being used. Quality of the setting out to ensure good alignment of felt and tiles. Pleasantly straight valley and verge lines. Tight, neat-looking interfaces of materials and elements.

Flat roof coverings – flat roof coverings are usually proprietary systems with a third-party warranty such as a BBA certificate. However, the fixing of any coverings is a highly important issue. The manufacturer's details and guidance must be strictly followed to prevent leaks or wind damage. Laps to parapets and service penetration points must be properly formed and sealed, all fixed in accordance with the manufacturer's instructions.

Pride – quality of the detailing and fixing of the above. A good understanding by the site manager of any specialist weatherproofing system being used. Tight, neat-looking interfaces of materials and elements with no bumps or air bubbles showing.

Ventilation, underfelt & insulation – adequate and appropriate insulation is to be laid over the whole of the ceiling area without the ventilation being impaired (check that the length of the eaves vent spacers are appropriate for the thickness of the insulation). Rigid insulation laid to roof slopes must still maintain the ventilation air gap. No gaps in the roof insulation can be allowed. All separate plots, at or under roof level, are to be correctly compartmentalised with specified fire stopping and sound insulation. Again, check for gaps and other defects. Fire stopping to eaves boxing and separating walls should be continuous and fully effective.

Pride – quality of installation of components such as vents to correctly perform their function. Rigid insulation very neatly cut to aid accurate and gap-free installation. Taping of joints to ensure it is kept in place. Maintenance of the quality of the insulation during construction and prior to application of the covering. Noticeable care taken when installing fire barriers.

Flashing, gutters & downpipes – fixings and supports for gutters and downpipes need to be functional and installed to manufacturer's requirements, as well as aesthetically acceptable. Flashings must be properly dressed and lapped with DPCs and cavity wall trays. As well as being vital elements in the waterproofing of a structure, flashings can have also have a major impact on the visual appearance of the building. Cleanliness and dressing are important considerations.

Pride – extra effort to achieve the above; perfect alignment of downpipes and swan necks, fixing of guttering and downpipes. Very neat dressing, jointing, clipping and detailing of leadwork, including how it is finished and jointed into masonry.

Firestopping (Roofs) - The correct installation of fire resisting materials at the junctions between a separating or compartment wall and a roof, at the junctions between cavities, above separating wall and within the boxed eaves at separating walls, are important to achieve their required performance standards. Care should be taken to ensure that products are installed accurately and precisely to meet their performance capabilities.

Pride – This important work should not be rushed, please ensure care and time is taken to achieve a robust 'as built' detail that does the drawing details and installation guidance of the products constructed justice. A carefully designed checking and signing-off system implemented on site will drive consistency and quality within this vitally important area of construction.

5. First fix

Windows & door frames – the correct installation of the frames should include sufficient and correctly spaced fixings to secure the perimeter sides but still allow the vertical DPC to function correctly. The installation of external windows and doors should be complete to provide a watertight shell before other first fix operations commence. Fire-resistant doors and frames should be fitted correctly to ensure adequate means of escape.

Pride – care in aligning, spacing and fixing of windows to compliment subframes and vertical DPCs. Consistent and even sealing at the perimeters of the windows and doors. Further consideration of the application of protection as described in the section Protection of work in progress may be appropriate once installed. Attention should be given to obtaining a proper fit rather than placing an over reliance on mastic and expanding foam.

Floor decking, stairs & soundproofing – this score line includes all types of decking, whether laid as a floating floor or as a simple deck. The correct thickness of boarding for the joist spacing is to be used, and the decking should be fixed sufficiently to prevent future creaks. All free edges should be supported, and any holes through the floor should properly formed. Stairs should be properly supported and comply with the Building Regulations regarding travel, particularly when serving more than one plot. Handrail and balustrade provision should be included under this heading. Where required walls should be insulated with materials of suitable thickness and density to provide adequate resistance to the transmission of sound. There should be adequate sound insulation to SVPs and associated boxing, including mineral wool or similar and double boarding to all exposed sides of the boxing (including any associated partition wall).

Pride – alignment and solid fixing of stairs including a solid fixing into adjacent walls if appropriate, quality of balustrade work and finishing of the stairs in relationship to the floor. Good support to kite winders and the first riser. Protection under the Protection of work in progress section may also be relevant here. Consistency of the cleanliness and width of gaps between decking and walls prior to cater for subsequent dry lining or plastering. Judges will be looking for good management and installation of sound resistant construction as well as rooms that contain a WC. Tidy solutions to achieve double boarding to SVP boxings should receive extra marks.

Services: electrical – the forming of holes, chases and notches through the structural floor members by the electrical trades are to be marked under this heading. Also, the installation of the main services carcass, including the brackets, clips and other required supports, should be considered. Wiring is to be in appropriate safe zones.

Pride – attention to detail and planning of drops, and thoughtful setting out of sockets and switches, will help to enhance the overall internal appearance for the second fix. Care of installation into timber and metal frame studwork and at party-wall installations. Consistency of clipping and support. Neatness is important, despite subsequent covering of most of this work.

Services: plumbing – the forming of holes, chases and notches through the structural floor members by the plumbing trades are to be marked under this heading. The installation of the main services carcass, including the brackets, clips and other required supports should be considered. The protective wrapping of pipes (next to cementitious materials etc.), and isolation of pipes from other pipes and materials, should be appropriate.

Pride – attention to detail and consistency of installation, with thought given to separation of pipes, joists and masonry where they pass through to prevent noise due to differential or thermal movement in the finished home. Temporary sealing of open ended pipes to prevent contamination from the build process. Temporary protection of radiator loops which might be trodden on or otherwise damaged or cause a trip hazard. Neatness is important, despite subsequent covering of most of this work.

Services: ventilation – the forming of holes, chases and notches through the structural floor members and walls for ventilation services are to be marked under this heading. The installation of brackets, hangers and other required supports should be considered. Appropriate insulation is to be fitted at time of installation. Inspection access openings are to be well planned and installed. Changes in direction of rigid ducting and the avoidance of sagging of flexible ducts are to be within acceptable limits.

Pride – attention to detail and consistency of installation. Particular neatness and careful routing and support of ductwork to the outside environment may gain marks as will extra effort to use solid ducting. Careful coring of holes in external walls, with evidence of planning and precautions, to avoid penetration of cavity trays and spalling of brick faces.

Non load-bearing & compartment walls – blockwork, metal or timber construction is to be assessed under this heading, including patented partition wall assembly. The fixings and overall stability are the main criteria. Installation of additional sound insulation within these walls can also be marked. The protection of copper pipes within galvanised partition walls needs to be checked. The formation of deflection heads between non load-bearing walls and soffits must be correct. Provision of appropriate DPC material between timber or metal partitions and the ground floor is an important consideration.

Pride – where timber or metal walls are constructed, additional marks may be gained where studs are accurately cut to the size of the opening, members that are well fixed or over and above requirements may gain extra marks. Extra attention to detail of the above is key to ensure performance standards are achieved for fire and sound. Other factors for masonry and frame mentioned earlier will also apply – coursing, setting out etc.

Plaster & dry lining to walls & ceilings – the correct number and spacing of fixings to the boards, the cutting for openings and the gap sealing of cut edges are all to be considered. Over-screwing of boards should be avoided. Plumb and squareness to corners, margins, recesses and projections, including pipe boxing, should be checked. Patented systems are often used, which may require special fixings. The flatness of walls and ceilings in particular are important matters. The correct boards for specific locations (i.e. around shower trays and other wet areas) should be used.

Pride – accuracy and consistency in fixing boards to studs and joists, staggering of boards over doorways, care of cuts around sockets and where boards meet other elements, and solid dabbing of boards, where applicable. Consistent care taken in the formation of square boxing and reveals to assist following trades. Consistency of screw fixings to dry lining – spacing and distance from edge of boards.

Firestopping (first fix) – Fire separation between compartments, protected routes and protected shafts should meet the performance requirements necessary for the building. It is recognised that due to site tolerances there will be small gaps between openings and fire door frames, however every effort should be made to ensure that the door frame or lining fits tightly within an opening. Approved expanding fire foam sealants may be used to seal gaps of up to 10mm. The fire foam must completely fill the void. Some fire sealant products can be used on gaps in excess of 10mm, though confirmation will be required from the Fire Door Testing Body to demonstrate that the fire door set meets the required level of fire resistance.

Pride - there should be no compromising over the installation of fire proofing, but further consideration will be given to any checking systems employed and the neatness of installation.

6. Second fix

Plumbing services, including equipment – exposed pipework is to be marked under this heading. Neat and presentable work is the main criteria. Ensure that there is easy access to shut-off valves and clear labelling to inform homeowners. Tun dishes to be positioned in easy line of sight and maintain level radiators with neat or hidden tails. No hard screws or metal washers used as fixings against porcelain fittings.

Pride – consistent and accurate pipework routing, neat insulation and fixing of the insulation. Pipework being kept out of sight within pedestals (if fitted). The neatness of holes in ceilings and walls where pipework passes through. Cleanliness of joints. Painting adds a neat look, but so does the clean finish of bare pipework. Radiators aesthetically positioned in room (e.g. centrally under windows where possible). Any labelling that goes beyond the norm to inform the homeowner (but not to excess). Testing and commissioning will form part of the overall management considerations in section 9.

Electrical services, including equipment – Ensure that switch backing-plates are fixed square with no gaps visible around edges. Wiring within tank cupboards to be appropriately clipped to avoid damage. Install fuse boxes so that they are labelled appropriately.

Pride – particular neatness of the routing and clipping of any exposed wiring (in tank cupboards, for example). Dressing of screws to sockets and switch plates. Evenness in positioning and spacing of electric socket and switch units. The success of this tends to depend on the work carried out at the first fix stage, so consideration should be given to the co-operation between the trades when deciding on extra marks for consistent spacing and positioning.

Joinery – includes the quality of the finish of the fitting and fixing of doors, skirting, architrave, window boards and ironmongery, including those in bathrooms and kitchens.

Pride – care and attention to details of skirtings, architraves and stairs, and thought given to the finished product to avoid leaving work that makes decorating or finishing awkward. Consistency of margins, mitres and other detailed joinery work, e.g. bathroom boxings. Squareness of skirtings to boxing and reveals – has any attempt been made to make up for any deficiencies in the squareness of the plasterboard in these areas and, if so, has it improved the aesthetics? Have the exposed edges of shelving, work tops and carcassing in under-sink cupboards been sealed?

7. Surface finishes

Internal finishes – from the purchaser's perspective, the presentation of this item sets one property ahead of its rivals.

Quality of paintwork, staining, tiling and ceiling finishes all add to the attractiveness of a home and its common parts; it may be considered subjective, yet plays an important part in overall customer satisfaction.

Pride – superior preparation of surfaces to receive finishes, fullness of paint and stained finishes, attention to detail of work around doors, windows etc, edges of architraves and the like all given a decorative finish. Attention given to the cuts, evenness of pattern and the use of visual centre lines will attract extra marks as will mastic finishes around tiles, fitted units and bathrooms. Lack of sharp corners to tiling; awkward details finished off with care.

Floor finishes – quality of workmanship is paramount, regardless of the floor covering. Protection of the floors during construction will help to produce a floor that looks new, rather than one covered with plaster and paint splashes. Both concrete and timber floors are to be considered under this heading. In addition, consider finishes to common parts. Tiling should be to an even flat plane with good joints that are not sharp underfoot.

Pride – any work that the builder carries out to make the floor attractive for the purchaser will to be considered. Quality of fitting work, accuracy of cuts, and setting out and alignment, including the use of obvious visual centre lines. Particular care having been taken to keep floors clean of paint spills and damage during the production process without the need to damage floors further in an intensive cleaning exercise. Planning of floor tile jointing clearly evident – whether it results in equal tile cuts or the lining of the joints with wall tile joints etc.

External finishes – external painting or staining to all woodwork and metalwork should be compatible with the surfaces being treated. The primary function of any system adopted is for weather protection, but the attractiveness of the finish should be considered.

Pride – as in the Internal finishes section, including the quality of fitting of fascias, claddings etc. Overall presentation and sharpness of the end product, avoiding the need for excessive cleaning by care taken during the build. Consistency of render shading. Particular care taken at interfaces of materials and colours and the correct use of stop beads and bell/drip beads.

8. External works

Retaining & freestanding walls – the construction of the retaining wall must be in accordance with the design, including behind-wall drainage, weep holes and the type of backfill used. The freestanding walls must be stable, using the correct masonry and mortar mix, have some form of capping to prevent water saturation and include movement joints, where necessary. Any timber or metalwork railings or features are included under this heading.

Pride – quality and attention to detail of masonry work and wall cappings. Correct application and neatness of mastic coverings to movement joints. Care taken over the coursing and joints in curved masonry walls. Attractive crease tile or drip detail – ensuring that any movement joint also goes through the creasing or capping. Neatness and robustness of capping course end bricks.

External landscaping – the subbase is also included under this heading and should be in accordance with NHBC Standards 10.2. External handrails and balustrades will also be considered. The surface of drives and paths should be functional, yet have proper line and level, falls and accurate cutting to add to the attraction of the building.

Pride – setting out and execution of surface finishes, consideration to other elements of the build, e.g. DPCs, thresholds and air bricks. Advanced thinking about Part M of the Building Regulations for ramps, steps and handrails. Neat planning of the positioning of manholes and other service access covers – not half on and half off a footpath. Neat cutting of slabs or dressing of surface materials around access covers. Cleanliness and sharpness of finish.

9. Organisation

Construction planning & programming – the site manager should be able to demonstrate good planning in the organisation of their workforce and the sequence of construction, as well as materials being available when needed. It is likely that the site manager will have assistants responsible for various sections or stages of the work. The overall control and management of staff is the site manager's responsibility. A decent working knowledge of plans for the development is expected.

Pride – knowing where to find details of construction amongst working drawings, and which are easily available and filed or hung in a logical order. A heightened awareness of current progress of work throughout the site including any issues particular to that development such as environmental matters, mining, noise, etc.

Health & safety, & welfare facilities – personal safety during the construction process is vital. Each operative should be protected with the correct footwear, helmets, coats, high visibility jackets and other task-specific PPE. Safe scaffolds and access around the site prevent accidents. Trailing leads and other trip hazards should be avoided. Whatever the level of welfare provision that is provided, it must be appropriate and maintained to an acceptable level of hygiene.

Pride – evidence of the setting of a benchmark and a culture of health and safety on the site should be clear. It should be witnessed that the management on site is prepared to act on non-compliance and take swift, effective action when encountered.

Storage of materials, site tidiness & waste control – when new materials are delivered to the site, they should be kept in good condition until used. Good storage and protection will ensure this is the case. The control of waste and its removal from work areas is evidence of a well-managed site. Storage space for materials and waste is generally limited on high-rise and city or town centre blocks, so an exceptionally high level of control is generally regarded as being necessary in these cases.

Pride – planning of resources and adequate facilities for the materials on site, including clean and level storage areas, covers and racks, and raising off the ground, where appropriate. Particular care for the clarity of labelling and organisation of materials to avoid incorrect usage or use on the wrong plots. Suitable facilities for waste and its correct segregation.

Protection of work in progress – all external construction should be properly protected during adverse weather conditions, and from falling materials and ongoing works. In addition, internal protection of finished sections of work will prevent damage and any subsequent repair work. An added benefit is that the completed work is kept clean.

Pride – timing of the application of protection and its maintenance during the build, appropriate materials for the protection required and inventiveness of the site manager to use waste materials for protection where a standard product has not been provided.

Quality control processes & personal impact – the site manager is responsible for quality control on site; they should be aware of any shortcomings and take the appropriate action to rectify these where required. The level of co-operation provided to NHBC should also be considered on this score line, e.g. call outs for key stage inspections at the correct time, with the construction checked and ready for inspection. The site manager should be leading by example and have the respect of all.

Pride – a clear quality control process is made evident by a lack of defects found and reported by inspection services. The cultivation of a good team spirit amongst directly employed personnel and subcontract staff, encouraging a culture of cooperation and respect. The site manager is making appropriate and effective improvements to company standard supplied facilities and systems.

Summary comments

The summary comments box (at the bottom of the front page of the marking sheet in the PiJ App) should contain a concise opinion of the overall performance and personal effectiveness of the site manager. Any extra information about the person that does not sit within the set marking lines can be added here. Other judges in the competition process will benefit from any extra clues about the skills of the site manager that are contained in the summary comments.

This section must be completed on all marking sheets prior to formal nomination.

Conversions

The following notes are intended to complement those for new build and should not be read as stand-alone guidance. They expand the headings with advice that is specific to conversion projects and remediation work. In the same way as a new build, the scores should reflect the site manager's ability to manage the site works. The work carried out by the design team is not under consideration. The type of building under conversion has no bearing on these score lines, although recognition should be given for good management of complex situations.

Not all score lines are covered in this section – where there is nothing to add to the new-build notes, the subsection has been omitted. Where no additional comments have been made, the score line should be regarded in the same way as a new build.

1 Foundations

Ground preparation – some conversions require underpinning, and the requirement that the excavation is to be free of debris should apply to all faces, including the underside of the existing wall foundation. The sequence of the excavation of the underpinning sections and any temporary supports should be considered under this heading.

Reinforcement & concrete placement – included under this heading is the fixing of dowel bars used during underpinning, and the concrete shutters. The use of any dry packing between the existing foundation and the new should also be marked. Where internal foundations or rafts are required, the marking should include the method used for tying to the existing structure.

2 Substructure and drainage

Walls & columns – all new substructure wall constructions should use compatible masonry to limit differential movement. Any new masonry supporting existing walls must be wedged and packed between new and old before pointing.

Waterproofing & ventilation – the installation of proprietary system DPCs should be considered under this heading. All methods used must achieve the same result as in a new build, i.e. prevent the passage of moisture into the building. Tanking must be applied in accordance with the manufacturer's instructions, particularly when being applied to existing walls. It should lap or rise above the position of the DPC. Where ventilators are installed, they should be adequate in number and suitable for the construction.

Subfloor services – new services may be needed, and the installation of these and the adaptation of existing ones are marked under this heading.

Ground floor – the alteration, repair and upgrade, including any treatments used to the floor construction, are to be considered.

Drainage – some existing drainage may be retained, and the method of connection to this needs to be considered.

3 Superstructure

Structural frame &/or load-bearing walls – all new walls supporting existing floors must be pinned to prevent settlement of the floor above. Both new and existing walls should be fully tied-in to the existing structure to maintain or enhance robustness. This can be done by masonry bonding or fixing metal angle straps. Existing separating walls should receive attention to ensure appropriate fire separation and resistance to sound transmittance.

Cavities & insulation – existing walls should behave as new and prevent moisture from entering the building. Any treatment systems used to achieve this should be considered. The addition of new insulation to the walls and the method of fixing should be carefully considered.

DPCs & trays – existing walls may require the installation of new DPC systems, and application and installation of an appropriate DPC must be managed carefully if it isn't to fail. Damp issues are a major cause of claims in conversions, and attention must be given to this area of the build.

Chimneys & flues – all chimneys should comply with the present Building Regulations and, where necessary, be upgraded. They must be part of the overall structure for stability.

Intermediate floor structure – the replacement, strengthening or renovation of defective members and subsequent treatments are included under this heading, together with all necessary straps, noggins and struts to meet current standards.

Lintels, beams & other structural elements – this includes all retained structural members and the treatment required for durability. All bearings of retained members should be examined and upgraded as necessary.

Fire stopping & soundproofing – both fire stopping and soundproofing measures are likely to need upgrading to modern acceptable standards on conversions. The identification of new requirements and the recognition of shortfalls of the existing construction are vital and the site manager must have a very good understanding of the requirements.

4 Roofs

Framing – all existing roof members are to be considered in the same way as intermediate floors under section 3. The adaptation of the existing members to the new scheme plus the framing of any new work are included.

Pitched roof coverings – there is often a requirement to fully or partially replace roof coverings on conversions. The stripping back of the roof and management of any problem areas that might be uncovered will be considered in this score line, as well as the quality of works for the replacement covering.

Flat roof coverings – similar considerations as those under Pitched roof coverings apply.

Ventilation & underfelt, insulation & fire stopping – as in section 3, consideration is to be given to the method used to ensure the provision for adequate ventilation, insulation and fire stopping – particularly as the existing provisions may well fall short of modern requirements.

Flashing, gutters & downpipes – the gutters and valleys should be properly supported off the roof frame. Where existing provisions are used, they must be checked for adequacy (both materially and for capacity). The flashings should be adapted to suit the existing architecture and replaced where necessary. There may be a requirement to carry out extra works to ensure that new flashings have appropriate laps and connections with DPC trays and roof coverings.

5 First fix

Windows & doors – where these are to be retained, they should be treated and repaired as necessary, proved to be appropriately weatherproof and operate correctly.

Floor decking & stairs – retained floor decks and stairs should be suitable and functional for present day purposes Appropriate checks should have been made for various forms of rot and other serious defects. Stairs must comply with the appropriate Building Regulations.

Fire stopping & soundproofing – as in the new build guidance', consideration is to be given to the method used to ensure the provision for adequate, ventilation, insulation and fire stopping - particularly as the existing provisions may fall short of modern requirements.

Plaster & dry lining to walls & ceilings – the method of fixing to the existing structure is an important consideration.

8 External works

Retaining and freestanding walls – new and existing walls that have been repaired should complement or enhance the existing work and be structurally sound.

9 Organisation

Construction planning & programming – in addition to the general management of new-build sites, conversions will often require management of temporary works, and the organisation of the installation and removal of these elements should be considered.

Health and safety, & welfare facilities – the site manager should make their workforce aware that alterations are hazardous and have procedures in hand should further intervention be required. Sites with existing buildings tend to restrict movement and storage; therefore, a tidy site will be a good indication of a well-organised site manager. The safety of any temporary works is also to be considered.

Storage of materials, site tidiness & waste control – waste from existing buildings may require special handling due to contamination or its hazardous nature. How this is being managed should be considered.