



# Tai Gweithwyr Diwydiannol yng Nghymru

Gofal a Chadwraeth

## Industrial Workers' Housing in Wales

Care and Conservation



 **Cadw**



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

## Lleoedd i ymweld â hwy

- 1 Amgueddfa Werin Cymru**  
Sain Ffagan, Caerdydd, CF5 6XB  
Ffôn 029 2057 3500 [www.aocc.ac.uk](http://www.aocc.ac.uk)  
Mae bythynnod Rhyd-y-car yn dangos sut y dodrefnwyd tai gweithwyr ar wahanol adegau.
- 2 Amgueddfa Lechi Cymru**  
Llanberis, Gwynedd, LL55 4TY  
Ffôn 01286 870630 [www.aocc.ac.uk](http://www.aocc.ac.uk)  
Rhes o fythynnod chwarelwyr wedi'u dodrefnu yn arddull gwahanol gyfnodau.
- 3 Bwthyn Joseph Parry**  
4 Chapel Row, Merthyr Tudful  
Ffôn 01685 723112 [www.merthyr.gov.uk](http://www.merthyr.gov.uk)  
Bwthyn gweithiwr haearn. Mae'r tu mewn wedi ei addurno a'i ddodrefnu yn yr 1840au.
- 4 Amgueddfa Drenewydd**  
26–27 Lower Row, Y Drenewydd  
Rhymini, NP22 5HQ Ffôn 01443 864224  
Mae un o'r bythynnod yn ail-greu digwyddiadau bob dydd mewn cartref prysur Fictoriaidd yn yr 1870au.
- 5 Amgueddfa Tecstilau Y Drenewydd**  
5–7 Commercial Street,  
Y Drenewydd, Powys SY16 2BL  
Ffôn 01686 622024 yn ystod oriau agor  
Ffôn 01938 554656 (Amgueddfa Powysland)  
ar adegau eraill  
<http://powysmuseums.powys.gov.uk>  
Mae'r ystafelloedd a'r gweithdai wedi'u dodrefnu i ddangos bywyd yn yr 1820au.

## Places to visit

- 1 Museum of Welsh Life**  
St Fagans, Cardiff, CF5 6XB  
Tel 029 2057 3500 [www.nmgw.ac.uk](http://www.nmgw.ac.uk)  
The Rhyd-y-car cottages show how workers' houses were furnished at different times.
- 2 Welsh Slate Museum**  
Llanberis, Gwynedd, LL55 4TY  
Tel 01286 870630 [www.nmgw.ac.uk](http://www.nmgw.ac.uk)  
A row of slateworkers' cottages furnished in the style of various periods.
- 3 Joseph Parry's Cottage**  
4 Chapel Row, Merthyr Tydfil  
Tel 01685 723112 [www.merthyr.gov.uk](http://www.merthyr.gov.uk)  
An ironworker's cottage. The interior is set in the 1840s.
- 4 Drenewydd Museum**  
26–27 Lower Row, Butetown,  
Rhyminy, NP22 5HQ Tel 01443 864224  
One of the cottages recreates the everyday events of a busy Victorian household in the 1870s.
- 5 Newtown Textile Museum**  
5–7 Commercial Street,  
Newtown, Powys SY16 2BL  
Tel 01686 622024 during opening hours  
Tel 01938 554656 (Powysland Museum)  
at other times  
<http://powysmuseums.powys.gov.uk>  
Rooms and workshops furnished to show life in the 1820s.

## Darllen pellach/ Further reading

Jeremy Lowe, *Welsh Industrial Workers' Housing 1774–1875* (Caerdydd/Cardiff 1994)

Malcolm Fisk, *Housing in the Rhondda 1800–1940* (Caerdydd/Cardiff 1996)

R. Merfyn Jones, *The North Wales Quarrymen 1874–1922* (Gwasg Prifysgol Cymru/University of Wales Press 1981)

Stephen Hughes, *Copperopolis: Landscapes of the Early Industrial Period in Swansea 1874–1922* (Comisiwn Brenhinol Henebion Cymru/Royal Commission on the Ancient and Historical Monuments of Wales 2000)

# Tai Gweithwyr Diwydiannol yng Nghymru

Gofal a Chadwraeth

## Industrial Workers' Housing in Wales

Care and Conservation



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government



## Cyflwyniad

Yn dilyn cau'r pyllau dwfn, dirywiad y diwydiannau metelegol a diflaniad y diwydiannau tecstilau ymron yn llwyr o Gymru, yr elfen amlycaf i oroesi yn y dirwedd ddiwydiannol yw tai'r gweithwyr. Wrth i ddiwydiannau newydd ddatblygu yn y ddeunawfed ganrif a'r bedwaredd ganrif ar bymtheg roedd angen darparu tai ar gyfer y gweithwyr oedd wedi mewnfudo yn agos at eu gweithle. Er nad terasau oedd yr unig ateb i'r broblem hon, roeddynt yn ddefnydd economaidd o le a deunyddiau ac fe'u hadeiladwyd ledled Cymru. Gan fod y dulliau adeiladu yn amrywio mewn gwahanol ardaloedd ac i ddeunyddiau lleol gael eu defnyddio, diffiniodd y tai gymeriad pob ardal.

Mae'r hynaf o'r anheddau hyn yn brin iawn erbyn hyn. Mae llawer wedi'u dymchwel ac mae'r rhai a oroesodd wedi cael eu haddasu'n sylweddol fel arfer er mwyn bodloni safonau cysur a rheoliadau adeiladu modern. Fodd bynnag, roedd tai mwy diweddar yn fwy o faint, oddi mewn ac o ran eu lleoliad, ac felly mae mwy ohonynt wedi goroesi. Cânt eu gwerthfawrogi gan eu bod yn gyfleus a chan amlaf maent wedi'u lleoli yng nghanol cymuned glòs, ac maent hefyd yn creu stoc anferth o anheddau y gellir eu defnyddio heddiw.

## Introduction

Terraced housing is one of the most enduring characteristics of the industrial landscape in Wales, following the closure of the deep coal mines, the decline of the metallurgical industries and the near-disappearance of the textile industries. As new industries grew in the eighteenth and nineteenth centuries it was necessary to provide housing for immigrant workers close to their place of work. Terraces, though by no means the only answer to this problem, were economical of space and materials and were built throughout Wales. Because building styles varied in different areas, and local materials were used, the houses help to define the character of each area.

The oldest of these dwellings are now very rare. Many have been demolished and those which survive have usually received extensive changes to meet modern comfort standards and building regulations. Later houses however are generally more spacious both inside and in their setting, and they survive in greater numbers. They are valued because they are convenient and are often located at the heart of a close-knit community, and they constitute a massive stock of usable dwellings for today.



*Gyferbyn: Terasau yng Nghwmparc, pentref glofaol yng Nghwm Rhondda Fawr (Photolibrary Wales). Top: Adeiladwyr yn gweithio ar Stryd Tallis, Cwmparc, tua 1890 (Llyfrgelloedd Rhondda Cynon Taf). Uchod: Bythynnod chwarelwyr llechi ym Methesda, Gwynedd, gyda'r domen lechi y tu ôl iddynt.*

*Opposite: Terraces at Cwmparc, a mining village in the Rhondda Fawr valley (Photolibrary Wales). Top: Builders working on Tallis Street, Cwmparc, about 1890 (Rhondda Cynon Taf Libraries). Above: Slate workers' cottages at Bethesda, Gwynedd, with the slate tip behind.*



*Uchod: Teras Rhyd-y-car yn Amgueddfa Werin Cymru. Ni all cadw cartrefi gweithwyr fel atyniad i ymwelwyr ond diogelu niferoedd bach o'r adeiladau pwysig hyn (Bwrdd Croeso Cymru).*

*Above: The Rhyd-y-car terrace at the Museum of Welsh Life. Preserving workers' houses as visitor attractions can protect only small numbers of these important buildings (Wales Tourist Board).*

Mewn rhai ardaloedd mae'r tai yn atgof chwerw o'r caledi corfforol a'r gorthrwm cymdeithasol gan berchenogion a rheolwyr y diwydiannau; mae hyn wedi lleihau gwerthfawrogiad y cyhoedd o'u gwerth fel adeiladau o ddiddordeb arbennig. Ond mae'r anheddau hyn yn arwyddocaol heddiw am eu bod yn cynnig tystiolaeth o hanes cymdeithasol, economaidd a diwylliannol y mwyafrif o drigolion Cymru o ddiwedd y ddeunawfed ganrif ymlaen. Gallwn ddangos parch tuag at yr hyn a gyflawnwyd ganddynt drwy gadw cymeriad ffisegol y tai lle bynnag y bo'n bosibl, yn yr un modd ag y cedwir tai tirlfeddianwyr, ffermwyr a thai trefol y bobl gyfoethog.

Mae rhai enghreifftiau arbennig o dai gweithwyr yn adeiladau rhestredig, sy'n rhoi diogelwch statudol iddynt. Mae eraill mewn ardaloedd cadwraeth. Mae rhai enghreifftiau wedi'u cadw fel arddangosiadau hanesyddol, er enghraifft tŷ Joseph Parry ym Merthyr Tudful. Adleolwyd y teras o Ryd-y-car ger Merthyr Tudful i'r Amgueddfa Werin yn Sain Ffagan lle y mae'n cael y sylw na chafodd erioed yn ei leoliad gwreiddiol. Ond dim ond nifer fach iawn o'r anheddau hyn y gall amgueddfeydd a statws adeilad rhestredig eu diogelu. Y ffordd orau o gadw cymeriad y mwyafrif o dai'r gweithwyr diwydiannol

In some areas the houses embody painful associations with physical hardship and social oppression by industrial owners and managers, and this has deflected public appreciation away from their worth as specially interesting buildings. But these dwellings are significant today because they provide evidence for the social, economic and cultural history of the majority of the inhabitants of Wales from the later eighteenth century onwards. We can show respect for their achievements by preserving the physical character of the houses wherever possible, just as the houses of landowners, farmers and wealthy townspeople may be preserved.

Some special examples of workers' housing are listed buildings, giving them statutory protection. Others are in conservation areas. A few examples of workers' housing have been preserved as museum displays, such as Joseph Parry's house in Merthyr Tydfil. The terrace from Rhyd-y-car, near Merthyr Tydfil, has been relocated to the Museum of Welsh Life at St Fagans, where it enjoys a celebrity that it never had in its original use. But museums and listed building status can protect only a tiny number of these dwellings. It is through continued use and sympathetic improvement that the

yw drwy eu defnyddio'n barhaus a'u gwella mewn ffordd ystyrlon.

Mae rhan gyntaf y llyfryn hwn yn ceisio egluro a darlunio ychydig o hanes a nodweddion arbennig tai'r gweithwyr diwydiannol. Mae'r ail ran yn dangos enghreifftiau o arfer da wrth eu haddasu ar gyfer bywyd yn yr unfed ganrif ar hugain, tra'n cadw eu cymeriad, ac mae'n egluro sut y gall dulliau adeiladu traddodiadol helpu i'w cadw mewn cyflwr da a chadw eu gwerth.

character of the majority of industrial workers' houses can best be retained.

The first part of this booklet sets out to explain and illustrate some of the special history and features of the houses of industrial workers. The second section shows examples of good practice in adapting them for life in the twenty-first century, while preserving their character, and explains how traditional building methods can help to keep them in good repair, thus maintaining their value.



*Uchod: Pan droswyd y teras hwn yng nghanol Treffynnon, Sir y Fflint, yn dai gwarchod, cadwyd yr ymddangosiad allanol.*

*Above: When this terrace in the centre of Holywell, Flintshire, was converted into sheltered accommodation, the external appearance was retained.*

*... of all the achievements of the makers of Wales between 1850 and 1914, the greatest was to house the population ...*

John Davies, *The Making of Wales*, (Cadw, 1996).





## Mwynau, diwydiant a thwf y boblogaeth

Am wlad mor fach, mae Cymru'n gyfoethog mewn adnoddau mwynol a chawsant eu gordefnyddio dros y canrifoedd diwethaf. Adnoddau mwynol enwocaf Cymru oedd ei dyddodion haearn a glo yng nghymoedd y De a'i gwelyau llechfaen yng Ngwynedd, ond yn ogystal â hynny, yn y gogledd-ddwyrain a'r Canolbarth roedd mwynloddiau plwm cynhyrchiol iawn; roedd Dolaucothi a Dolgellau yn cynhyrchu aur gwerthfawr; ac ar Fynydd Parys ar Ynys Môn roedd un o'r dyddodion copr gorau yn y byd. Erbyn ail hanner y ddeunawfed ganrif roedd twf y diwydiannau metelegol yng Nghwm Tawe, yn ardal Blaenau'r Cymoedd ac yn ardal y chwareli yn Eryri wedi cyflymu y tu hwnt i raddfa'r diwydiant gwledig a fu mewn safleoedd arloesol megis gwaith weiren Dyffryn Gwy, ac ardal mwyndoddi Greenfield ger Treffynnon.

Roedd y gwaith o gloddio, paratoi a chludo mwynau Cymru yn mynd law yn llaw â grwpiau cynyddol o anheddau ar gyfer y gweithlu yng nghymoedd yr afonydd, ar lethrau creigiog ac ar hyd yr ardaloedd arfordirol. Roedd gweithwyr, a ddenwyd gan obeithion am gyflogau gwell a safon well o fyw, yn llifo o'r ardaloedd amaethyddol cyfagos i'r cymunedau trefol fel Bethesda ac

## Minerals, industry and population growth

For such a small country, Wales is rich in mineral resources, and they have been vigorously exploited over recent centuries. The most renowned of these are the iron and coal deposits in the valleys of south Wales and the slate beds of Gwynedd. But in addition, north-east and mid-Wales had highly productive lead mines; Dolaucothi and Dolgellau produced gold in prized amounts; and Parys Mountain on Anglesey had one of the greatest copper deposits in the world. By the end of the eighteenth century, the growth of metallurgical industries in the Swansea valley and the Heads of the Valleys area, and slate quarrying in Snowdonia, had accelerated far beyond the scale of rural industry at such pioneering sites as the Wye valley wire works and the Greenfield valley smelting area near Holywell.

The extraction, preparation and transport of minerals was accompanied by burgeoning groups of habitations for the workforce in the river valleys, on rocky hillsides and along coastal belts. Attracted by the prospect of higher wages and a better standard of living, labourers flooded in from the agricultural areas to growing urban communities such as



*Gyferbyn:* Yn y dyddiau cynnar adeiladwyd tai mewn ardaloedd a fu gynt yn wledig. Dyma ddarlun o bentref Rhiwbryfdir, Gwynedd, yn 1878 lle'r oedd gweithwyr yn chwarel lechi Llechwedd yn byw. (Casgliad John Thomas, Llyfrgell Genedlaethol Cymru). Uchod: Abermo, Gwynedd. Roedd safleoedd addas ar gyfer cartrefi gweithwyr yn brin mewn ardaloedd bryniog a defnyddiwyd pob darn o dir posibl (Bwrdd Croeso Cymru).

*Opposite:* In the early days houses were built in areas that had previously been rural. This is a view of the village of Rhiwbryfdir, Gwynedd, in 1878, where workers at Llechwedd slate quarry lived (John Thomas Collection, National Library of Wales). Above: Barmouth, Gwynedd. Suitable sites for houses were in short supply in hilly areas and every available space was used (Wales Tourist Board).



*Uchod: Datblygiad rhubanog ar hyd cwm Rhondda Fawr, yn edrych i'r gogledd-orllewin (CBHC).*

*Above: Ribbon development along the valley of the Rhondda Fawr, looking north-west (RCAHMW).*

Abertawe a threfi haearn Merthyr, Aberdâr, Tredegar, Pontypŵl ac Acrefair (Wrexham).

Yna yng nghanol y bedwaredd ganrif ar bymtheg, wrth i'r diwydiant glo dwfn ynghyd â gwell cysylltiadau trafniadaeth weddnewid cymoedd y De, roedd mewnfudiad gweithwyr o siroedd cyfagos Lloegr a chriwiau o Wyddelod a weithiai am gyflogau is, yn gyffredin. Mae'r cyfrifiad ar gyfer sir Forgannwg yn cofnodi trawsnewidiad yn y boblogaeth: o 71,000 o drigolion yn 1801 i 232,000 yn 1851 i dros 1.1 miliwn erbyn 1911. O ran datblygiadau diwydiannol a thai, yn y pum mlynedd ar hugain o 1861 fe newidiodd cymoedd y Rhondda o fod yn ardal wledig anghysbell gydag ambell i waith glo, i fod yn anheddiad strimynnog di-dor o Bontypridd i Flaenrhondda a Glyn Rhedynog.

Yn y Canolbarth, denodd twf y system ffatri o gynhyrchu gwlân yn y bedwaredd ganrif ar bymtheg bobl o'r wlad i ddechrau, yna gweithwyr a'u teuluoedd o Ganolbarth Lloegr. Chwaraeodd mewnfudiad ar raddfa fawr hefyd ran yn natblygiad y porthladdoedd morol o Gaerdydd a Chasnewydd i Lanelli a Chaerdybi. Wrth i'r aneddiadau hyn ddatblygu, bu'n rhaid i'r rhesi gwasgaredig o dai ddatblygu yn rhesi hir cyfochrog ac yna'n strydoedd o dai teras ac mewn rhai lleoedd dyfeisiwyd cynllun grid a hyd yn oed gynlluniau geometrig.

Bethesda and Swansea, and the iron towns of Merthyr, Aberdare, Tredegar, Pontypool and Acrefair (Wrexham).

Then in the mid-nineteenth century, the deep mining of coal, allied to improved transport links, took over the south Wales valleys. Immigration of workers from the nearest English counties and of low-waged Irish gangs became commonplace. The census for the county of Glamorgan records a population transformation: from 71,000 inhabitants in 1801 to 232,000 in 1851 to over 1.1 million by 1911. As far as industrial and housing development is concerned, in the twenty-five years from 1861 the Rhondda valleys changed from an area of rural remoteness punctuated by isolated coal workings, into nearly continuous ribbon settlement from Pontypridd to Blaenrhondda and Ferndale.

In mid-Wales the growth of the factory system of wool production in the nineteenth century attracted first country people, then operatives and their families from the English Midlands. Large-scale immigration also played its part in the expansion of sea ports from Cardiff and Newport to Llanelli and Holyhead. As these settlements developed, scattered rows of houses gave way to long parallel rows then to streets of terraced houses, and in some places grid layouts and even geometric plans were devised.

## Anheddau dros dro

Yn y cyfnod diwydiannol cynnar, roedd anheddau gweithwyr yn dal i berthyn i'r traddodiad gwledig o adeiladu bythynnod. Adeiladwyd llawer o dai'r gweithwyr ac adeiladau diwydiannol ar dir diffaith neu ar dir comin agored. Yn ystod blynyddoedd cyntaf y diwydiant haearn yn ardal Merthyr, Blaenafon a Blaenau'r Cymoedd, roedd nentydd neu dir garw yn rhwystr i godi safleoedd tai felly yr hyn a welwyd fel arfer oedd aneddiadau afreolaidd o fythynnod hwnt ac yma. Golygai hyn y gallai teuluoedd greu eu llecynnau garw o dir ar gyfer eu trin.

Yn aml, tai unnos oedd yr anheddau i ddechrau a godwyd dros nos er mwyn sicrhau bod tân yn llosgi ar yr aelwyd erbyn y bore. Yn ôl traddodiad gellid hawlio meddiannaeth ar y cwt ynghyd â thir cyfagos 'cyn belled ag y gellid taflu bwyell'. Nid oedd fawr o syndod felly mai o ddeunyddiau elfennol iawn y codwyd yr adeiladau hyn, gan gynnwys clai a cherrig garw ar gyfer y waliau, mwd ar gyfer y lloriau a thrawstiau pren tila y gellid eu gorchuddio â brwyn, rhedyn neu dyweirch ar gyfer y toeau. Ni fyddai gwydr yn y ffenestri a byddai mwg yn dianc drwy'r brwyn ar y to.

Tai unllawr gyda ffenestri bach oedd tai sgwatwyr a glowyr y ddeunawfed ganrif a

## Makeshift dwellings

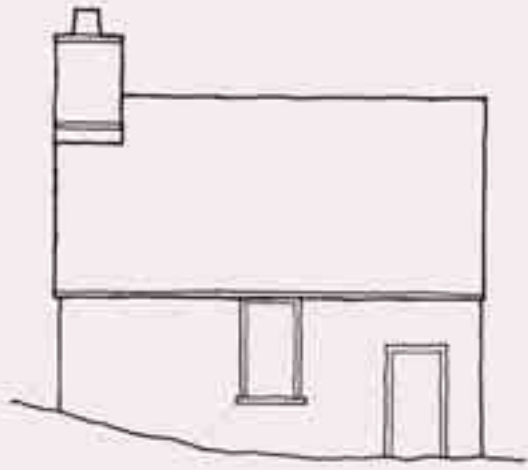
In the early days of industry, workers' dwellings still belonged in the rural tradition of cottage building. Most workers' houses and industrial buildings were built on unproductive land or on unenclosed commons. During the first phase of iron exploitation in the Merthyr, Blaenavon and Heads of the Valleys area, house sites were so restricted by streams or rough ground that scattered cottages in irregular settlements on open land were usual. This meant that families could carve out their own rough plots of ground for cultivation.

Some dwellings may have started out as *tai un nos* (one-night houses) which were set up overnight to have a fire burning in the hearth by morning. By tradition, possession of the shack could then be claimed along with the surrounding land 'as far as an axe could be thrown'. Not surprisingly, such makeshift buildings were made from basic materials, including clay and rough stones for the walls, mud for floors, and flimsy wooden struts, which could be covered with rushes, ferns or turf, for roofs. Windows would not be glazed, and smoke escaped through the thatching.



*Uchod: Adeiladwyd llawer o fythynnod ar dir a oedd yn dir comin agored neu dir nad oedd yn ddefnyddiol at unrhyw ddiben arall.*

*Above: Many cottages were built on land that was unenclosed common land or was not useful for any other purpose.*



godwyd gerllaw'r pyllau glo a'r twneli mwyngloddio yng nghwm Tawe. Y tu mewn iddynt byddai gwres mewn un pen gyda simnai a chrogloffft fach y cyrhaeddid ati gan ddefnyddio ysgol. Yn y Rhondda, nid oedd y tai parhaol cyntaf yn fwy o ran maint na'r cytiau pridd a thyweirch a'u rhagflaenai o farnu yn ôl yr enghraifft a gofnodwyd yn Nhŷ Du, y Cymer. Bwthyn un ystafell â waliau o gerrig llanw oedd hwn; gydag un ffenestr a drws blaen ychydig oddi ar y canol gyda thalcen trwchus a ymgorfforai aelwyd a simnai. Roedd gofod cysgu ychwanegol o dan y to gwellt yn y grogloffft y cyrhaeddid ati gan ddefnyddio ysgol.

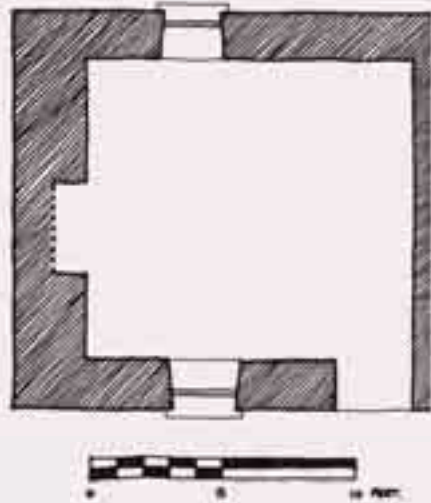
### Rôl y tîrfeddianwyr a'r meistri diwydiannol

Ar y dechrau, bu'n rhaid i'r rhan fwyaf o berchenogion y mwyngloddio gymryd diddordeb yn lles y gweithwyr a dechreuwyd datblygu tai parhaol er mwyn denu llafurlu. Roedd partneriaeth ddiwydiannol Blaenafon, sef Hopkins, Hill a Pratt yn teimlo rheidrwydd i ddefnyddio rhan helaeth o'u cyfalaf prin i godi niferoedd mawr o dai gweithwyr o 1788 ymlaen oherwydd bod eu gwaith haearn mor anghysbell. Ym Merthyr Tudful ar ddechrau'r bedwaredd ganrif ar bymtheg hyd at ganol y ganrif honno, roedd y tai yn amlach na pheidio

Eighteenth-century squatters' and colliers' houses around coal shafts and mining tunnels in the Swansea valley were of one storey with small windows. Inside there was a heated end with a chimney and a small *crogloffft* (half-loft) reached by a ladder. In the Rhondda, the first permanent houses were no larger than their mud and turf predecessors judging by a recorded example at Tŷ Du, Cymmer. This is a one-roomed cottage with rubble walls; it has a single window and an offset door to the front, and a thick gable end incorporating a hearth and chimney. The loft, reached by a ladder, gave some additional sleeping space under the thatched roof.

### The role of the landowners and industrial masters

Most early mineral owners had to take some interest in the housing of their workers and began to develop permanent housing in order to attract a labour force. The Blaenavon industrial partnership of Hopkins, Hill and Pratt felt compelled by the remoteness of their ironworks to use a significant part of their scarce capital to build workers' houses from 1788 onwards. In Merthyr Tydfil in the early to mid-nineteenth century, much housing was provided by the proprietors of the



*Uchod: Cynllun a drychiad bwthyn syml un ystafell yn y Rhondda yn dyddio o adeg cyn y cyfnod diwydiannol (Darlun gan Christopher Powell, drwy ganiatâd Merton Priory Press).*

*Above: Plan and elevation of a simple one-room cottage in the Rhondda dating from before the industrial period (Illustration by Christopher Powell, by permission of Merton Priory Press).*

yn cael eu darparu gan berchenogion y gweithiau haearn, tra yn Nowlais adeiladodd hapfasnachwyr ac adeiladwyr lleol llawer o'r dref ar dir a brydleswyd. Er enghraifft adeiladwyd yr anheddau pedair ystafell yn Chapel Row yn Georgetown yn 1825 ar gyfer gweithwyr medrus Gwaith Haearn Cyfarthfa.

Ni ddarparwyd y rhan fwyaf o dai gweithwyr gan y diwydianwyr yn uniongyrchol, ond gan hapfasnachwyr ar raddfa fach a oedd yn adeiladu ar dir a brydleswyd. Wrth i'r diwydiant glo ffynnu, roedd tir yn y cymoedd ac yn nhrefi'r dociau yng Nghasnewydd a Chaerdydd a oedd yn tyfu'n gyflym yn cael ei brydlesu ar gyfer tai. Erbyn canol y bedwaredd ganrif ar bymtheg, roedd prydlesau Ystâd Bute o naw deg naw mlynedd yn arferol, ac — yng Nghaerdydd o leiaf — roedd cyfyngiadau ar gynllun yr adeiladau a'r dewis o ddeunyddiau, yn ogystal â chyfamodau atgyweirio a phaentio wedi'u hymgorffori yn y cytundebau cyfreithiol. Ym mhen isaf cwm Tawe, ger Gwaith Copr y Graigwen, comisiynwyd rhai o'r tai gan y perchenogion a rhai a godwyd gan y gweithwyr eu hunain ar dir a brydleswyd. Yn yr un modd, yng nghanol y bedwaredd ganrif ar bymtheg yn Llanelli, cofnodwyd bod y teulu Neville wedi darparu tir ar rent hirdymor rhesymol i'w gweithwyr copr a'u glowyr er mwyn iddynt adeiladu eu tai eu hunain. Roedd y duedd hon o weithwyr yn codi eu tai eu hunain wedi'u hwyluso gan

ironworks, while at Dowlais local speculators and builders built much of the town on leased land. For example, the four-room dwellings at Chapel Row in Georgetown were built about 1825 for skilled workers at the Cyfarthfa Ironworks.

Most workers' housing was not provided by the industrialists directly, but by small-scale speculators building on leased land. As the coal boom gathered force, land in the valleys and the expanding dock towns of Cardiff and Newport was leased out for housing. By the mid-nineteenth century, leases of ninety-nine years were usual on Bute land, and — in Cardiff at least — restrictions on the design of buildings and choice of materials plus repair and painting covenants were incorporated into the legal agreements. In the lower Swansea valley, near the White Rock Copperworks, some housing was commissioned by the proprietors and some by the workers themselves on leased land. Similarly, in mid-nineteenth-century Llanelli, the Neville family is recorded as providing land at a moderate long-term rent for their copper workers and colliers to organize the building of their own houses. This house building by the workers was made possible by the workers' own building clubs, savings banks and building societies.



*Top: Adeiladwyd Chapel Row, Georgetown ar gyfer gweithwyr medrus Gwaith Haearn Cyfarthfa. Roedd y tai yn wynebu Camlas Morgannwg. Uchod: Roedd un o'r tai yn gartref i'r cyfansoddwr Joseph Parry pan oedd yn blentyn, ac mae ar agor i'r cyhoedd. Fe'i dodrefnwyd fel cartref o'r 1840au (Bwrdd Croeso Cymru).*

*Top: Chapel Row, Georgetown, was built for skilled workers at the Cyfarthfa Ironworks. The houses faced the Glamorgan Canal. Above: One of the houses was the childhood home of the composer, Joseph Parry, and it is open to the public. It is furnished as a home of the 1840s (Wales Tourist Board).*



BUTETOWN  
Y DRENEWYDD  
Mae'n Sêllo Cymru  
Gwernol yn Ofis

glybiau, banciau cynilo ac adeiladau cymdeithasu y gweithwyr eu hunain.

Yng Ngwynedd, lle yr oedd gan y perchenogion afael mor gadarn ar dir, prydlesu oedd yr arfer o ddiwedd y ddeunawfed ganrif ymlaen. Lledaenodd yr arfer o godi tai hapfasnachol gan weithredwyr bach oherwydd roedd arian ar gael drwy gymdeithasau cyfeillgar a chyrrff buddsoddi eraill. Yn ddiweddarach yn y ganrif yn Llanberis ymddengys mai'r chwarelwyr eu hunain a gododd y rhan fwyaf o'r tai neu a'u prynodd oddi wrth adeiladwyr lleol, er bod rhent tir yn parhau i gael ei dalu i'r ddau brif dirfeddiannwr yn y dref. Yn yr ardal rhwng Bethesda ac Abergynolwyn, roedd trefniadau prydlesu yn anochel yn ymgorffori'r ddarpariaeth y byddai'r eiddo cyfan gan gynnwys yr adeiladau yn trosglwyddo yn ôl i'r trefeddiannwr pan fyddai'r brydles wedi dod i ben. Condemniwyd gorthrwm prydlesau o'r fath gan Lloyd George mewn araith yn 1903, lle y dynwaredodd agwedd a llais y trefeddiannwr:

*...when you have built your house, it does not belong to you. Part of it will belong to me [the landlord], and that part will grow year by year. I will have a few stones this year, and the stones will grow year by year, and I will take your house piece by piece. When you [the tenant or quarryman] are an old man half of it will belong to me, and when you are dead it will pass to my son, and not to yours.*

D. Lloyd George, a ddyfynnwyd gan/quoted by R. Merfyn Jones, *The North Wales Quarrymen 1874–1922*, (Gwasg Prifysgol Cymru/University of Wales Press, 1981).

In Gwynedd, where the slate quarry proprietors had a strong hold over land ownership, leaseholding was the practice from the late eighteenth century onwards. Speculative housing development by small-scale operators became widespread because funds were made available by friendly societies and other investing bodies. Later in the century, at Llanberis, the majority of houses seem to have been commissioned by the quarrymen or bought by them from local builders, though ground rent continued to be paid to the two main landowners in the town. In the area between Bethesda and Abergynolwyn, leasehold arrangements invariably incorporated the provision that the entire property including buildings would revert to the landlord when the ground lease was up. The oppressiveness of such leases was famously condemned by Lloyd George in a 1903 speech in which he mimicked the landlord's attitude and voice.



*Gyferbyn: Roedd cynllun arfaethedig Y Drenewydd yn cynnwys tai, llety barics ac ysgoldy. Fe'i hadeiladwyd ar gyfer gweithwyr Gwaith Haearn Rhymni. Uchod: Mae'r ffotograff hwn o Flaenau Ffestiniog oddeutu 1875 yn dangos cymysgedd o fythynnod unigol a thai teras (Llyfrgell Genedlaethol Cymru).*

*Opposite: The planned layout at Butetown included houses, barrack accommodation and a schoolroom. It was built for workers at the Rhymney Ironworks. Above: This photograph of Blaenau Ffestiniog in about 1875 shows a mixture of single cottages with terraced housing (National Library of Wales).*



Y BERLLAN



## Tai'r chwarelwyr yng Ngwynedd

Gellir gweld hanes cymdeithasol ardaloedd chwareli gogledd Cymru yn glir drwy batrwm yr anheddau. Drwy gydol y bedwaredd ganrif ar bymtheg a dechrau'r ugeinfed ganrif, parhaodd y chwarelwyr i fod yn llafurlu brodorol Cymraeg â gwreiddiau lleol cadarn. Roedd gan rai chwarelwyr yng Ngwynedd glytiau bach o dir gyda'u bythynnod yn eu milltir sgwâr, a'r rheini mor bell i ffwrdd ag Ynys Môn a gogledd sir Feirionnydd, lle y câi eu teuluoedd eu magu gan barhau i ffermio ymhell o'r canolfannau diwydiannol. Mewn chwareli fel Dinorwig, roedd dynion yn teithio o bell bob dydd Llun gan gysgu mewn barics yn ystod yr wythnos cyn dychwelyd wedi llwyr ymlâd i Ynys Môn ar y Sadwrn canlynol.

Roedd anheddau'r chwarelwyr wedi'u codi o gerrig ac o lechi yn ôl y traddodiad lleol, ond roedd y pentrefi a'r pentrefannau gwasgareddig a ddatblygodd yn ardal Eryri yn adlewyrchu ei natur ddiwydiannol. Codwyd

*[The Bethesda quarryman's] love of the land has not been lost amid the sunless caverns of Snowdonia. A cottage and a piece of land seem necessary to his happiness and ambition, and to the latter he devotes his leisure hours with meritorious assiduity.*

A. G. Bradley, *Highways and Byways in North Wales* (London, 1919).

## Slate quarrymen's housing in Gwynedd

The social history of the slate-quarrying areas of north Wales can be seen very clearly in the pattern of housing. Throughout the nineteenth century and early twentieth century the quarrymen remained a homogeneous Welsh-speaking labour force with strong local roots. Some Gwynedd quarry workers retained small plots of land with cottages in their homelands, as far away as Anglesey and north Merioneth, where their families could grow up and continue farming away from the industrial centres. At quarries like Dinorwic, such men made a long journey to work each Monday, and slept in barrack accommodation during the week before returning exhausted to Anglesey on the following Saturday.

The quarrymen's dwellings were built of stone and slate in the local tradition, but the scattered villages and townships that grew in Snowdonia



*Gyferbyn: Rhos o dai a adeiladwyd ar gyfer gweithwyr y chwarel ym Methesda, Gwynedd. Uchod: Bwthyn unig ger Llanberis, Gwynedd.*

*Opposite: A row of homes built for quarry workers at Bethesda, Gwynedd. Above: An isolated cottage near Llanberis, Gwynedd.*



*Uchod: Cynllun ffurfiol y pentref a Phorth y Nant lle yr adeiladwyd tai yn 1878 ar gyfer gweithwyr y chwarel gwenithfaen leol.*

*Above: The formal layout of the village of Porth y Nant, where houses were built in 1878 for workers in the local granite quarry.*

nifer o resi teras yng nghysgod y tomenni llechi. Mae ardal Stryd John ym Methesda, a ddatblygodd yn raddol yn y 1820au yn esiampl dda o'r modd yr adeiladwyd tai deulawr ar hyd rhwydweithiau o lwybrau troed cysylltiedig nas cynlluniwyd i fyny'r llethrau creigiog y tu ôl i'r Stryd Fawr. Mae hyn yn wrthgyferbyniad amlwg â ffurfioldeb y terasau a godwyd mewn grwpiau ym Mhorth y Nant ar benrhyn Llŷn a phrif strydoedd Blaenau Ffestiniog lle'r oedd y prinder gofod ar lawr y dyffryn wedi arwain at gynlluniau systematig yn debyg i'r hyn a welwyd yn nherasau'r meysydd glo.

Ni chyflogwyd merched yn y diwydiant llechi ac yn aml nid oedd dewis ganddynt ond aros gartref. Dywedwyd bod rhai yn datblygu gymaint o obsesiwn â chasglu celfi a thrugareddau fel bod eu parlwr yn gorlifo ag eiddo a byddai eu teuluoedd yn mynd i ddyled o'r herwydd.

bore the mark of industrialization. Many terraced rows lay under the shadow of the slate tips. The John Street area of Bethesda, which developed gradually in the 1820s, well illustrates how two-storey houses were built along unplanned networks of linked footpaths up rocky slopes behind the High Street. This contrasts with the formality of the grouped terraces at Porth y Nant on the Llyn peninsula and the main streets of Blaenau Ffestiniog, where the pressure of space on the valley floor led to systematic planning similar to the coalfield terraces.

Women were not employed in the slate industry and often had no choice but to stay at home. Some were said to develop such an obsession with collecting furniture, finery and ornaments that their parlours overflowed with possessions and their families got into debt.

*They must get a grandfather clock as large as Goliath's coffin and worth eight guineas; an eight-guinea glass cupboard full of trinkets; an eight-guinea dresser moaning under the weight of crockery, as well as china dogs, cats and soldiers and in between them all there is no room for the quarryman to turn.*

Dyfyniad o/quoted in R. Merfyn Jones, *The North Wales Quarrymen 1874–1922* (Gwasg Prifysgol Cymru/University of Wales Press, 1981).

## Tai'r gwehyddwyr yn y Canolbarth

Datblygodd diwydiant gwlân Sir Drefaldwyn ei ddull penodol ei hun wrth i'r system ffatrioedd ddatblygu rhwng 1780 a 1820. Erbyn 1835, roedd y Drenewydd wedi datblygu yn dref mor llewyrchus fel y câi ei hadnabod fel prif ganolfan y diwydiant gwlân gan ddwyn yr enw 'Leeds Cymru'. Consortiwm o dirfeddianwyr ac entrepreneuriaid a oedd yn bennaf cyfrifol am y llwyddiant hwn wedi iddynt sefydlu tref ffatri ar dir ar lan ogleddol afon Hafren ym Mhenygloddfa. Bu mwy o fasnachu wrth i Gamlas Sir Drefaldwyn gael ei hymestyn yn 1821 ac wrth i gyfnewidfa wllân gael ei hadeiladu yn yr arddull neoglasurol. Yn y deng mlynedd ar hugain hyd at 1831 — pan oedd diwydiant gwlân y dref ar ei anterth — gwelodd y Drenewydd dwf yn ei phoblogaeth o 1,665 i 6,555.

Roedd yr ateb cyntaf i'r her o sicrhau tai i'r llafurlu cynyddol hwn yn fater penodol yng Nghymru i Llanidloes a'r Drenewydd. Roedd cynllun y terasau trillawr a phedwar llawr a adeiladwyd gefn wrth gefn yn aml yn deillio o enghreifftiau cynharach yng Nghanolbarth Lloegr. Roedd y llawr gwaelod a'r llawr cyntaf yn dai. Byddai blaen y tai yn wynebu'r stryd a'r cefn yn wynebu'r cyrtiau. Roedd aleau cul drwy lawr

## Weavers' housing in mid-Wales

The Montgomery woollen industry developed its own distinctive house type as the factory system evolved between 1780 and 1820. Newtown in particular flourished so well that by 1835 it was the principal centre of flannel manufacturing with the nickname of 'the Leeds of Wales'. This success was largely due to a consortium of landowners and entrepreneurs who established a factory town on land on the north bank of the Severn, at Penygloddfa. Trade was enhanced by an extension to the Montgomeryshire Canal in 1821 and the building of a neoclassical flannel exchange. In the thirty years to 1831 — when the town's flannel industry was at its peak — Newtown experienced a population surge from 1,665 to 6,555 people.

The first solution to the challenge of housing this expanding workforce was specific in Wales to Llanidloes and Newtown. Three- and four-storey brick terraces, often laid out back-to-back, were built to a design derived from earlier examples in the English Midlands. The ground and first floors were houses. The front houses faced the street, the rear ones into a court. Narrow passageways through the ground floor of each block



*Uchod: Roedd rhywfaint o'r adeiladau ar gyfer gweithwyr tecstiliau yn y Drenewydd yn cynnwys llety islaw a gweithdai wedi eu goleuo'n dda uwchben.*

*Above: Some of the accommodation for textile workers in Newtown incorporates housing below and well-lit workshops above.*



gwaelod pob bloc yn rhoi mynediad o'r stryd i'r rhes gefn a hefyd i'r anheddau eraill, y gweithdai a'r tai bach a godwyd o amgylch y cyrtiau cefn. Ar y trydydd a'r pedwerydd llawr roedd 'ystafelloedd ffatri' lle y rhoddwyd gwyddiau a sianis nyddu. Roedd gan y tai ffenestri mawr i adael y golau i mewn ar gyfer gweithio a gwnaed y fframiau'n gyfan gwbl neu'n rhannol o haearn o'r gefeiliau lleol (ac yn ddiweddarach, y ffowndriau). Gellir gweld natur y trefniadau hyn orau yn yr enghraifft sy'n goroesi yn Amgueddfa Tecstilau y Drenewydd a adeiladwyd yn 1836. Dwy ystafell yn unig oedd i nifer o'r tai (un ar y llawr gwaelod a'r llall ar y llawr cyntaf) gyda grisiau troellog cul, er bod rhai yn ddigon mawr i rannu'r ystafell ar y llawr cyntaf yn ddwy. Roedd rhai tai teras a thri llawr hefyd heb ystafelloedd ffatri. Nid oedd gan un o'r tai garthffosiaeth fewnol a rhannai eu trigolion y tai bach yn y cyrtiau cefn. Gan fod y cyflenwad dŵr yn dod o ffynhonnau yn y cyrtiau roedd llygriad yn fygythiad cyson.

Roedd rhai o'r tai cyfunol a'r adeiladau ffatri gyfun yn fawr iawn, ond ar y cyfan roedd y blociau yn gywasgedig. Mewn rhai manau adeiladwyd bloc cyfan o ystafelloedd ffatri, fel y Ffatri Cloc yn Bryn Street, y Drenewydd.

gave access from the street to the back row and also to the other dwellings, workrooms and privies that were built around the enclosed back courts. On the third and fourth floors were 'factory rooms', where looms and spinning jennies were installed. The houses had big windows to let in light for working and the frames were made partly or wholly of iron from local forges (and later, foundries). The character of these arrangements can best be seen at the Newtown Textile Museum, which is housed in a surviving example built in 1836. Many of the houses were of two rooms only (one up, one down), with a narrow turning stair, though some were large enough to have the upper space divided into two rooms. There were also some three-storey terraced houses without factory rooms. None of these houses had any internal sanitation, and their occupants shared privies in the courts. Since the water supply was from wells sunk in the courts, there was a constant threat of contamination.

A few of the combined house and factory buildings were very large, but mostly the blocks were quite compact. In some places blocks entirely of factory rooms were built, such as Clock Factory, Bryn Street, Newtown.



*Gyferbyn a top: Roedd teuluoedd yn byw ac yn gweithio yn yr un adeilad. Yn Amgueddfa Tecstilau y Drenewydd gall ymwelwyr weld sut y defnyddiwyd y lle'n wreiddiol. Mewn tai eraill rhannwyd yr ystafelloedd gwaith ar gyfer llety domestig. Uchod: Yn y rhesi o dai cefn-wrth-gefn yn y Drenewydd roedd y drysau i'r rhes gefn yn y cyrtiau.*

*Opposite and top: Families lived and worked in the same building. At the Newtown Textile Museum, visitors can see how the space was used originally. In other houses the work rooms have been divided for domestic accommodation. Above: In the blocks of back-to-back houses at Newtown the doors into the rear row were in the courtyard.*



## De Cymru: tai'r glowyr a'r gweithwyr metel

Yn sgîl y diwydiannaeth gyflym yn ne Cymru crëwyd atebion newydd i'r her o adeiladu tai i'r gweithwyr. Crëwyd yr enghreifftiau cyntaf ar hap, ond cyflwynwyd datblygiadau wedi'u cynllunio ar raddfa fawr yn fuan.

Un o'r enghreifftiau cynharaf o dai teras yw Lower Row yng Ngellideg ger ffwrneisi Cyfarthfa. Adeiladwyd y rhes hon o dai gweithwyr haearn fesul cam o 1765 ar safle ffermdy, gyda'r tai olaf yn cael eu hychwanegu erbyn 1794. Yn yr ychwanegiadau diwethaf, mae gan bob tŷ ag iddo un ffenestr, ddwy ystafell ar y llawr gwaelod ynghyd â phantri ac un ystafell wely fawr ar y llawr uchaf yr arweiniai grisiau pren troellog ati. Mae rhesi fel y rhes hon yn dod o'r cyfnod cyn y terasau unffurf a fabwysiadwyd yn ddiweddarach ym mhob man.

Mae Forge Row yng Nghwmafon yn enghraifft o'r teras unffurf sy'n dyddio o ddechrau'r bedwaredd ganrif ar bymtheg. Mae'n deras deulawr sy'n dyddio o 1804–06 wedi'i godi ar lethr y bryn ger tŷ meistr y ffwrnais. Adeiladwyd y tai fel parau cymesur mewn rhes unffurf o dan un to llechi wedi'i rannu gan simneiau; roedd gan bob tŷ ddwy ystafell ar bob llawr ag un ffenestr yr un (blaen a cefn), drysau ffrynt a chefn, a grisiau ger y lle tân.

## South Wales: the housing of miners and metal workers

Rapid industrialization in south Wales fostered new solutions to the challenge of housing the workers. The first were haphazard, but planned development on a large scale was introduced early.

One of the earliest examples of terraced housing is Lower Row at Gellideg near the Cyfarthfa furnaces. This row of ironworkers' houses was built progressively from about 1765 on to a farmhouse, with the last houses added by 1794. In the latest additions, each single-window house has two ground-floor rooms plus a larder, and a large undivided sleeping room on the upper floor reached by turning wooden stairs. Rows like this pre-date the uniform terraces that were later universally adopted.

Forge Row at Cwmavon is an early nineteenth-century example of the uniform terrace. It is a two-storey terrace of 1804–06 set on the hillside close to the forgemaster's house. The houses were built as symmetrical pairs in a uniform row under an overall slate roof divided by chimneys; each house had two rooms on each floor with a window to each room (front and back), front and back doors, and a staircase beside the fireplace.



*Gyferbyn: Mae Forge Row, Cwmafon, yn enghraifft gynnar o deras unffurf. Addaswyd rhai o'r parau hyn o dai yn anheddau unigol, ond yn allanol mae'r cynllun wedi'i gadw. Top: Y teras cynnar yng Ngellideg lle yr adeiladwyd y tai fel rhan o ffermdy. Uchod: Y ffermdy gwreiddiol ar ddiwedd y rhes.*

*Opposite: Forge Row, Cwmavon, is an early example of a uniform terrace. Some of these pairs of houses have been turned into single dwellings, but externally the design has been preserved. Top: The early terrace at Gellideg where houses were built onto a farmhouse. Above: The original farmhouse at the end of the row.*



*Top: Yn Sgwar Stock, Blaenafon atgyweiriwyd y tai ac maent yn rhan o Safle Treftadaeth y Byd. Uchod: Y tai fel y byddent wedi ymddangos efallai yn oddeutu 1841 yn Engine Row (darlun gan Geraint Derbyshire).*

*Top: At Stack Square, Blaenafon, the houses have been repaired and are part of a World Heritage Site. Above: The houses in Engine Row as they might have appeared in about 1841 (illustration by Geraint Derbyshire).*

Wrth i ddiwydiannau de Cymru ehangu drwy'r bedwaredd ganrif ar bymtheg, y teras trefol oedd yr ateb mwyaf ymarferol i'r broblem o sicrhau darpariaeth tai ddigonol ar gyfer y boblogaeth gynyddol. Digwyddodd hyn yn Nhreforys, Abertawe ar ddiwedd y ddeunawfed ganrif. Datblygodd y porthladdoedd hefyd yn strydoedd â therasau deulawr unfurf ar bob ochr iddynt. Disodlodd y cynllunio systematig hwn y tueddiad cynharach o letya'r boblogaeth gynyddol drwy ychwanegu cyrtiau mewnol y ceid mynediad iddynt drwy ale o ffrynt y stryd. Yng nghanol y bedwaredd ganrif ar bymtheg ym Merthyr roedd yr anheddau gorlawn ger Afon Taf wedi'u llygru â sbwriel ac roedd y system ddraenio yn annigonol, felly roedd heintiau yn fater o bryder cyhoeddus. Erbyn 1852 roedd gan Abertawe dros naw cant o anheddau o'r fath gydag un ystafell i bob llawr. Nid oedd ganddynt gyflenwad dŵr glân ac roedd yn rhaid rhannu tai bach heb ddraeniad digonol.

Ymddangosodd anheddau ffurfiol hefyd wedi'u cynllunio'n ofalus (fel Y Drenewydd ger Rhymni), ac eraill, fel y Triangl ym Merthyr Tudful (wedi'i hen ddymchwel) trwy hap a damwain i raddau helaeth. Roedd cynllun y gridiau ffurfiol hyn o dai yn deillio o'r syniadau o gymesuredd a phensaerniaeth a ddefnyddiwyd eisoes yn Aberdaugleddau yn y 1790au ac a gyhoeddwyd mewn llawlyfrau cynllunio ar gyfer pentrefi ystadau

As the industries of south Wales grew in scale through the nineteenth century, the compact urban terrace was the most practical solution to the problem of making adequate housing provision for the booming population. This happened at Morryston, Swansea, from the late eighteenth century. In the seaports, too, development intensified into streets lined on both sides with uniform two-storey terraces. This systematic planning replaced the earlier tendency for the growing population to be accommodated by the insertion of infill courts reached by alleys through the street frontages. In mid-nineteenth-century Merthyr, the crowded dwellings close to the River Taff were contaminated with refuse and suffered from inadequate drainage, so that epidemics became a matter of public concern. By 1852, Swansea had over nine hundred courtyard dwellings of one room per floor. They had no clean water supply and shared privies without adequate drainage.

There also appeared formal layouts, some carefully designed (such as Butetown, Rhymney), others, like the Triangle at Merthyr Tydfil (long demolished), partly accidental. The design of formal grids of housing owed much to ideas of symmetry and architecture that had already been used at Milford Haven in the 1790s and were published in design guides for



maenorau gwledig fel un John Wood yng Nghaerfaddon ddiwedd y ddeunawfed ganrif. Adeiladwyd tai yn ôl cynlluniau clasurol mor bell i ffwrdd â Doc Penfro, Tremadog a Llanelli gan berchenogion hyddysg, nawddogol diwydiant. Yn Y Drenewydd, mae gan y terasau, a adeiladwyd yn yr arddull neo-Paladaidd, gymysgedd o dai gyda phedair ystafell a rhywfaint o ystafelloedd barics.

### De Cymru: cynllun mewnol y tai teras

Wrth i barau gwasgarog a thai teras cul ddatblygu'n rhesi deulawr hwy, bu'n rhaid cynllunio'r ystafelloedd mewn modd ymarferol iawn. Roedd amrywiaethau lleol o ran arwynebedd y llawr a'r defnydd o bentai a pharedau mewnol, yn ogystal â safle'r drysau, ffenestri, simneiau a'r grisiau.

Mae'r dref gynnar a godwyd yn ôl cynllun yn Nhreforys ger Abertawe wedi gadael enghreifftiau o dai deulawr cymesur, sydd ddwy ystafell o led gyda llefydd tân ar bob pen. Mae ganddynt ddrws cefn ond dim ffenestri cefn uwch.

Weithiau ychwanegwyd pentai at y cefn ar y llawr gwaelod er mwyn rhoi mwy o le; roedd hyn yn caniatáu i risiau pren ar ongl sgwâr gael eu hadeiladu yn yr ystafell fyw. Roedd grisiau cerrig troellog cyfyng wedi'u hadeiladu yn wal drwchus y lle tân yn nodweddiadol o nifer o'r anheddau gweithiau haearn a'r meysydd glo, er enghraifft ym

country house estate villages such as John Wood's of Bath in the late eighteenth century. Other classically-inspired designs were built as far afield as Pembroke Dock, Tremadoc and Llanelli by learned and paternalistic proprietors of industry. At Butetown, the terraces, in the neo-Palladian style, had a mixture of houses with four rooms and barrack accommodation.

### South Wales: the internal layout of terraced houses

As scattered pairs and narrow terraced houses evolved into longer two-storey rows, so resourcefulness was employed in the design of the accommodation. There were local variations in the amount of floor space and the use of rear extensions (sometimes called outshots) and internal partitions, as well as the positioning of doors, windows, chimneys and stairs.

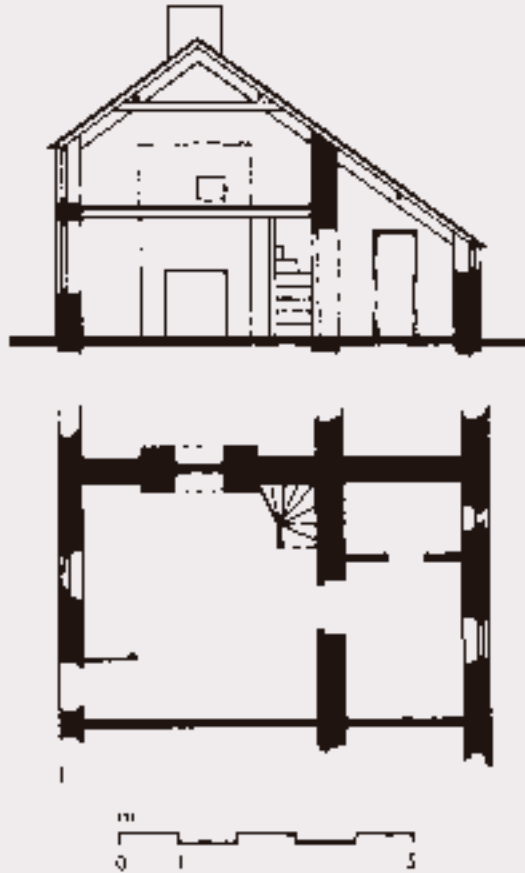
The early planned town at Morriston near Swansea has left examples of shallow two-storey symmetrical houses that are two rooms wide with hearths at both internal ends. They have a back door but no upper rear windows.

Sometimes lean-tos were added to the rear on the ground floor to provide additional service space; this allowed space for right-angled wooden stairs to be built within the living area. Tightly



Top: Roedd gan Y Triongl, Merthyr Tudful (wedi'i ddymchwel ers hynny) gynllun anarferol (Amgueddfeydd ac Oriolau Cenedlaethol Cymru). Uchod: Bwthyn Joseph Parry, Georgetown, Merthyr Tudful. Tu ôl i'r setl gwelir y drws yn wal y lle tân yn arwain at y grisiau (Amgueddfa ac Oriol Gelf Castell Cyfarthfa, Merthyr Tudful).

Top: The Triangle, Merthyr Tydfil (since demolished), had an unusual plan (National Museums & Galleries of Wales). Above: Joseph Parry's cottage, Georgetown, Merthyr Tydfil. Behind the settle can be seen the doorway to the stairs in the hearth wall (Cyfarthfa Castle Museum & Art Gallery, Merthyr Tydfil).



*Uchod: Mae'r to 'cat-slide', ffordd economaidd o ychwanegu ystafelloedd ychwanegol, yn nodwedd ar fythynnod Rhyd-y-car yn Amgueddfa Werin Cymru (Amgueddfeydd ac Oriolau Cenedlaethol Cymru).*

*Above: The 'cat-slide' roof, an economical way of adding extra rooms, is a feature of the Rhyd-y-car cottages at the Museum of Welsh Life (National Museums & Galleries of Wales).*

Merthyr ac yng nghymoedd y Rhondda.

Er mwyn cael mwy o le y tu mewn, ychwanegwyd estyniad ar y cefn neu 'outshot' i gynllun tai syml ag un ystafell ar bob llawr. Yn ardal Merthyr o tua 1800, ac yn arbennig ar gyfer gweithiau haearn amrywiol y teulu Crawshay, roedd gan dai o'r fath do a adwaenid fel 'cat-slide', gyda llethr gefn barhaus i lawr i ran uchaf y ffenestri yn yr 'outshot'. Mae teras Rhyd-y-car, sydd erbyn hyn yn Amgueddfa Werin Cymru, Sain Ffagan, yn enghraifft o'r math hwn o dŷ tair ystafell. Mae dwy ystafell ar y llawr gwaelod yn y tai hyn ag iddynt ffryntiadau cul, ynghyd â grisiau cerrig troellog yn wal y simne ac ystafell wely ychwanegol a phantri o dan y 'cat-slide'.

Roedd gan rhai tai o ddechrau'r bedwaredd ganrif ar bymtheg yn Abertawe ffryntiadau culach gyda'r drws ffrynt ychydig oddi ar y canol, ond roedd ganddynt ddwy ystafell ar bob llawr gydag aelwydydd blaen a chefn, ffenestri ar y llawr uchaf yn y cefn a phared mewnol gyda grisiau syth. Roedd gan y toeau lethr 'cat-slide' parhaus yn y cefn i ddarparu ystafell wely yn y cefn hanner uchder uwchben yr ystafell gefn ar y llawr gwaelod. Erbyn canol y bedwaredd ganrif ar bymtheg, yng Ngwaith Copr Cwmafan ger Port Talbot, roedd gan y tai pedair ystafell, ddeulawr llawn ag iddynt ystafelloedd o faint cyfartal yn y blaen a'r cefn, gyda grisiau syth a phob ystafell wedi ei goleuo gan ffenestr hael. Defnyddiwyd cynllun tebyg

curving stone stairs built in the thickness of the hearth wall were a characteristic feature of many of the ironworks and coalfield dwellings, for example in Merthyr and the Rhondda valleys.

In the search for more internal space, a rear extension or 'outshot' was added to the simple one up, one down house plan. Around Merthyr Tydfil from about 1800, and particularly for the Crawshay family's various ironworks, houses of this form had 'cat-slide' roofs, with a continuous back slope down to the top of the windows of the rooms in the outshot. The Rhyd-y-car terrace, now erected at the Museum of Welsh Life, St Fagans, is an example of this three-room type. Each narrow-fronted house has a two-room ground floor with curving stone stairs in the chimney wall and an extra bedroom and larder under the cat-slide.

Some early nineteenth-century Swansea houses had narrower fronts with offset front doors, but were two rooms deep with front and back hearths, upper rear windows and a subdivided interior with a straight staircase. The roofs had a continuous cat-slide rear slope arranged to provide a part-height rear bedroom over the downstairs back room. By the mid-nineteenth century, at Cwmafan Copperworks near Port Talbot, the four-room houses had two full storeys with equal-sized rooms back and front, and

ychedig yn ddiweddarach ar gyfer gweithwyr copr Abertawe a dyma'r cynllun a ffafriwyd drwy gydol y bedwaredd ganrif ar bymtheg hwyr yn y Rhondda. Lle bo'n bosibl, hyd yn oed mewn dyffrynnoedd ag ochrau serth fel y Rhondda, adeiladwyd tai yn fwriadol ar safleoedd gwastad i osgoi'r gost ychwanegol o lefelu'r tir neu o ddarparu waliau cynhaliol ar lethrau'r bryniau. Weithiau câi'r tai yn y Rhondda a godwyd yn y cyfnod hwn eu cynllunio gyda choridor yn rhedeg heibio'r ystafell fyw i gegin lled llawn yn wynebu'r iard yn y cefn.

Roedd Tai'r Scotch, a godwyd yn Llwynypia gan Archibald Hood, a agorodd bwl glo'r Glamorgan yn 1863 yn dai ffrynt dwbl. Mae gan y tai hyn, nad ydynt yn ddwfn iawn o'u blaen i'w cefn, ddwy ystafell fawr ar y llawr gwaelod a drws ffrynt a drws cefn sy'n agor ar lwybr cul yn rhedeg ar draws y rhes. Roedd y tŷ bach ar draws y lôn gefn, ynghyd â gardd hir a mynedfeydd wedi'u palmantu, yn dynodi symudiad tuag at godi terasau o dai gwell â mwy o le y tu mewn iddynt ac ehangder y tu allan ym mlynnyddoedd diweddarach y bedwaredd ganrif ar bymtheg yng Nghymru.

*When we were all in bed we could hear as plain as anything what the people in the house above us were saying and doing, for there was only the thickness of the bit of board between us above the rafters against which dad used to knock his head... There was no back way to our house, for the back wall was built against the foot of the hill.*

Jack Jones, *Unfinished Journey* (Oxford University Press, New York, 1937).

straight stairs. Each room was lit by a generous window. A design on similar lines was used a little later for Swansea copper workers, and it became the preferred type throughout later nineteenth-century Rhondda. Where possible, even in steep-sided valleys like the Rhondda, houses were deliberately built on flat sites to avoid the extra cost of levelling the ground or providing retaining walls on hillsides. The Rhondda houses of this period were sometimes designed with a corridor running past the living room to a full-width kitchen/living room facing the backyard.

The Scotch Houses, built at Llwynypia by Archibald Hood, who sank the Glamorgan colliery in 1863, were double-fronted. These houses, shallow in depth, have two large ground-floor rooms and front and rear entrances each opening on to a narrow path running along the row. The provision of privies across the rear lane, with long gardens in front and paved entries, pointed the way to the increased accommodation and external spaciousness of the many urban terraces of later nineteenth-century Wales.



*Top: Lower Row, rhes ddeuol yn Y Drenewydd. Mae'r tŷ uchaf ar lefel y stryd ar yr ochr arall. Roedd rhesi deuol yn caniatáu i fwy o deuluoedd fyw yn yr un faint o le. Uchod: Mae'r tŷ isaf yn amgueddfa Y Drenewydd yn dangos sut y byddai teulu tlawd wedi byw.*

*Top: Lower Row, Butetown, a dual row. The upper house can be entered at street level on the other side. Dual rows allowed more families to be housed in the same amount of space. Above: The lower house in the museum at Butetown shows how a poor family might have lived.*



*Uchod: Oakdale, Caerffili, pentref cynlluniedig o dai ar gyfer glowyr a adeiladwyd rhwng 1909 a 1924 (CBHC).*

*Above: Oakdale, Caerphilly, a planned village of houses for miners, was built between 1909 and 1924 (RCAHMW).*

## Tai teras yng Nghymru yn yr ugeinfed ganrif

Er yr adroddiadau am yr amodau hylendid dychrynlyd mewn nifer o ardaloedd trefol gorboblog yn y De o'r 1840au ymlaen, prin oedd y gwelliannau a gafwyd yn y cyflenwadau dŵr a charthffosiaeth hyd nes yr ysgogwyd y llywodraeth i weithredu yn sgîl yr achosion niferus o golera a heintiau eraill. Nid oedd yr amodau tai fawr gwell yn ardaloedd y chwareli yng Ngwynedd, lle'r oedd adroddiadau swyddogol yn nodi dro ar ôl tro bod tai'r chwarelwyr wedi'u hadeiladu ar dir gwael, corslyd ac yn 1875 roedd adroddiad Arolygydd y Mwyngloddiau yn arbennig o lym ynghylch yr amodau byw ym Mlaenau Ffestiniog. Er hynny, amrywiodd gweithrediad is-ddeddfau iechyd a'r is-ddeddfau cysylltiedig o ardal i ardal. Ym Methesda cafwyd Deddf Gwelliant yn 1854 ac yn y Rhondda yn 1879. Roedd y deddfau hyn yn gosod isafswm safonau ar gyfer lled ffyrdd a lle rhwng y tai ac ar gyfer draenio, casglu sbwriel a gwaredu elifiant yn effeithiol.

O'r cyfnod hwnnw yn nhrydydd chwarter y bedwaredd ganrif ar bymtheg pan leisiwyd pryderon ynghylch iechyd cyhoeddus o ran tai gweithwyr, dechreuwyd newid patrymau adeiladu tai o resi ar ben ei gilydd i strydoedd lletach. Roedd helaethrwydd Tai'r Scotch

## Workers' houses in Wales into the twentieth century

Whilst there were reports about distressing sanitary conditions in many congested urban areas in south Wales from the 1840s onwards, little improvement took place in water supplies and sewerage until the virulent recurrence of cholera and other epidemics compelled government action. Housing conditions were scarcely better in the slate-quarrying areas of Gwynedd, where official reports commented repeatedly on how the quarrymen's houses were built on poor, boggy ground, and the 1875 report by the Inspector of Mines was especially harsh about living conditions in Blaenau Ffestiniog. Even so, the implementation of health and related byelaws varied from place to place. For Bethesda an Improvement Act was passed in 1854, and for Rhondda in 1879. These laws laid down minimum standards for road widths and space between houses, and for drainage, refuse collection and effective effluent disposal.

From the time of public health concerns over workers' housing in the third quarter of the nineteenth century, layouts began to change from close-packed rows into wider streets. The spaciousness of the layout of Scotch Houses at Llwynypia is

yn Llwynypia yn ddatblygiad arbennig o nodedig (o 1865 ymlaen). Roedd yr anheddiad a sefydlwyd gan ystâd y Penrhyn yn y 1870au ar Douglas Hill, Bethesda uwchlaw Bangor ar ffurf bythynnod pâr mewn lleiniau amgaeedig hir yn wynebu tir comin garw. Dim ond deng mlynedd ar hugain oedd hyd y prydles, ond yn sgîl y gofyniad cynllunio caeth, sefydlwyd patrwm o godi anheddau yn yr ardal lechi a oedd yn wahanol iawn i derasau nodweddiadol y rhan fwyaf o'r ardaloedd diwydiannol yng Nghymru.

Erbyn diwedd y ganrif, ymddangosodd syniadau iwtopaidd am ardd-bentrefi fel Pontywaun yng Nghwmcarn, Caerffili, pentrefi model fel yr anheddiad parhaol yng Nghwm Elan, Powys, a'r terasau cydweithredol yn Lôn Seiriol ym Mangor. Daeth y ddarpariaeth tai teras diwydiannol i ben erbyn y Rhyfel Byd Cyntaf, a gyda dyfodiad tai cyngor, cafwyd newid radical yn y syniadau am ddarparu tai i'r gweithwyr.

*The furnishings of the workers' houses varied enormously, as noted by an observer of two neighbouring interiors in Cyfarthfa Row, Merthyr, houses built for skilled workers in 1840. In the kitchen of one house were 'two mahogany chests of drawers, each of which supported a looking-glass ... There was also a well-polished eight-day clock and a set of good mahogany chairs'. In contrast, the other house had 'no other furniture than a three-legged table, a small bench, two stools and a few utensils for cooking ... upstairs were three beds of hay without a single article of furniture'.*

Richard Hayman, *Working Iron in Merthyr Tydfil* (Ymddiriedolaeth Treftadaeth Merthyr Tudful/Merthyr Tydfil Heritage Trust, 1989).

a noteworthy development (from 1865 onwards). The settlement that was established by the Penrhyn Estate in the 1870s at Douglas Hill, Bethesda, above Bangor, took the form of paired cottages set in long enclosed plots facing a rough common. The leases were notoriously short at thirty years, but the enforced planning established a preferred design for the quarrying region that was very different from the terraces that characterize much of industrial Wales.

By the end of the century, there emerged utopian ideas for garden villages such as Pontywaun at Cwmcarn, Caerphilly, model villages like the permanent settlement at Elan Valley, Powys, and the co-operative terraces at Seiriol Road in Bangor. The provision of industrial terraced houses had come to a close by World War I, and, with the arrival of council housing, ideas on housing the workforce were radically changed.



Uchod: Yng ngardd bentref Pontywaun, Cwmcarn, Caerffili, adeiladwyd y cartrefi hyn gan Gwmni Dur, Haearn a Glo Glynabwy ar gyfer ei weithwyr rhwng oddeutu 1918 a 1922.

*Above: At Pontywaun garden village, Cwmcarn, Caerphilly, houses were built by the Ebbw Vale Steel, Iron and Coal Company between 1918 and 1922.*



## Gofalu am dai teras y gweithwyr

Cadw cymeriad arbennig  
tai teras Cymreig

Mae enghreifftiau o'r hynaf o dai gweithwyr sydd wedi cadw'u cymeriad gwreiddiol yn brin iawn erbyn hyn ac mae llawer wedi'u rhestru er mwyn eu cadw. Mae rhai yn fwy addas ar gyfer eu haddasu at ddibenion heblaw bod yn gartrefi gan y byddent yn cael eu hystyried yn rhy gyfyng ar gyfer bywyd yn yr unfed ganrif ar hugain. Mae tai diweddarach, sydd wedi goroesi mewn niferoedd mawr, yn dal i fod â nodweddion diddorol. Yn yr adran hon, mae enghreifftiau dros Gymru gyfan yn dangos ei bod yn bosibl cadw'r nodweddion hyn a moderneiddio ac ymestyn y tai er mwyn eu diweddarau.

### Cymeriad lleol

Mae cymeriad arbennig tai gweithwyr diwydiannol yn dibynnu'n bennaf ar gyd-destun pob rhes yn y dirwedd. Pan gaiff y ffactor hwn ei gyfuno â'r defnydd o ddeunyddiau adeiladu lleol, gellir nodi elfen Gymreig unigol yn stoc dai pob ardal yn y wlad. Er enghraifft, pan agorodd camlas Sir Forgannwg yn 1794, bu'n bosibl i adeiladwyr doi'r tai ym Merthyr gyda llechi o'r Gogledd a fewnforiwyd drwy

## Caring for workers' terraced houses

Conserving the special character  
of Welsh terraced houses

Examples of the earliest workers' houses retaining their original character have become very rare, and some have been listed to preserve them. Some may be more suitable for conversion for purposes other than housing because they would be considered too cramped for life in the twenty-first century. Later houses, which survive in great numbers, still have interesting features. In this section, examples from around Wales show that it is possible to keep these features while modernizing and extending the houses to bring them up to date.

### Local character

The distinctive character of industrial workers' houses primarily depends on the context of each row in the landscape. When this factor is combined with the use of locally available building materials, an individual Welsh quality can be identified in the housing stock of every region in the country. For example, when the Glamorganshire Canal opened in 1794, the builders were able to roof houses in



*Gyferbyn ac uchod: Mae Tai Tywyn, Prestatyn, Sir Ddinbych yn fythynnod pysgotwyr. Fe'u troswyd yn ganolfan fusnes trwy ychwanegu adeiladau mewn arddull gyfoes yn y cefn. Cedwir cymeriad a chyfrannedd gwreiddiol blaen yr adeiladau.*

*Opposite and above: Tai Tywyn, Prestatyn, Denbighshire, are fishermen's cottages. They have been converted into a business centre by adding buildings in a contemporary style at the rear. The original character and proportions of the front of the building are preserved.*



*Top: Mae pyrth anghyffredin tai'r chwarelwyr hyn yn rhan o'u cymeriad. Uchod: Mae pob un o'r bythynnod yn y rhes hon o fythynnod pysgotwyr ym Mhorthgain, Sir Benfro, wedi cadw'u simneiau.*

*Top: The unusual porches of these slate workers' houses are part of their character. Above: All the houses in this row of fishermen's cottages at Porthgain, Pembrokeshire, still have their chimneys.*

## Tai Gweithwyr Diwydiannol yng Nghymru • Industrial Workers' Housing in Wales

ddociau Caerdydd. Mewn gwrthygyferbyniad, slabiau cerrig traddodiadol ar drawstiau trymach a ddefnyddid o hyd yn 1830 yng nghwm Rhymni. Er mai ychydig filltiroedd i ffwrdd yw cwm Rhymni, nid oedd ganddo gamlas.

### Gwelededd

Mae lleoliad nifer o'r terasau ar dir gerllaw nodwedd amlwg fel afon, camlas, rheilffordd neu fynydd-dir garw. Mewn safleoedd eraill roedd y dirwedd afreolaidd yn golygu bod mwy fyth o dai yn llygad y cyhoedd. Mae nifer fawr o'r terasau sydd wedi goroesi yn amlwg iawn o lefydd cyhoeddus. Golyga hyn y bydd unrhyw gamau i ddymchwel, i rannol-ddymchwel neu gyflwyno newidiadau sylweddol i'r adeiladau hyn neu o'u hamgylch yn cael effaith weledol fawr ar yr amgylchedd lleol.

### Cymeriad y rhes

Fel arfer dechreuodd pob tŷ mewn teras gyda'r un math o ddrws, ffenestri a manylion eraill. Byddai newidiadau i ffryntiad un tŷ yn cael effaith ar y rhes gyfan. Bydd newid deunyddiau toi, simneiau, waliau a'u gorchuddion, ffitiadau ffenestri a drysau hefyd yn newid cymeriad y teras. Mae'r berthynas rhwng waliau blaen — y tŷ neu'r ardd — â'r stryd o bwys mawr, a gall newidiadau i waliau amgáu a chodi adeiladau bach amharu ar

Merthyr with slates brought from north Wales via Cardiff docks. In contrast, traditional stone slabs supported on heavier roof-timbers were still being used in 1830 in the Rhymney valley, which is only a few miles away but had no canal.

### Visibility

The setting of many terraces is on land beside a dominating feature like a river, canal, railway or rough uplands. At other sites the irregular terrain exposes the houses to public view. Many surviving examples of terraced housing are highly visible from public spaces. This means that any action to demolish, part-demolish or introduce material changes in and around these buildings will have a visible impact on the local environment.

### Character of the row

All the houses in a terrace usually started out with similar doors, windows, and other details. Changes to one house frontage affect the whole row. Changes to the roofing material, chimneys, walls and their surface coverings, windows and door fittings will alter the character of the terrace. The relationship of the front walls — of the house or the garden — to the street is of great importance, and changes to enclosing walls and the erection of



eu cymeriad gymaint â newidiadau i'r anheddau eu hunain. O ran rhesi o dai teras a gynlluniwyd yn ôl cynllun cyffredinol, megis yn Y Drenewydd lle mae gan y tai fargodau amlwg, a thoeon clip ac mae gan bob rhes gynllun cymesur; bydd unrhyw addasiadau i dŷ unigol yn cael effaith andwyol iawn ar y cymeriad.

### Deunyddiau adeiladu

Mae cadw ac aildefnyddio deunyddiau adeiladu lleol, yn hytrach na defnyddio deunyddiau modern nad ydynt yn ddeunyddiau brodorol yn eu lle, yn helpu i gadw 'naws y lleoliad'. Lle bo'n bosibl, dylid mabwysiadu'r egwyddor 'tebyg am debyg' wrth ddewis deunyddiau adeiladu a deunydd gorchuddio ar gyfer atgyweiriadau neu estyniadau.

### Carreg a briciau

Yn ne Cymru, byddai terasau fel arfer yn cael eu hadeiladu o garreg leol Pennant a gloddiwyd weithiau o'r cystradau glo yn y pyllau dwfn. Yn aml defnyddid cerrig nadd ar gorneli'r waliau ac o amgylch y ffenestri a'r drysau. O ddiwedd y ddeunawfed ganrif ymlaen, byddai briciau o'r gwaith lleol yn cael eu defnyddio'n gynyddol ar gyfer y nodweddion pensaernïol hyn ac ar gyfer y simneiau oherwydd eu bod yn gwrthsefyll tân yn well. Ar ôl 1850 neu oddeutu hynny,

small structures may spoil their character as much as alterations to the dwellings themselves. Where a terraced row was designed to an overall scheme, such as at Butetown, where the houses have oversailing eaves and hipped roofs and each row has a symmetrical design, any alterations to an individual house will have a specially adverse effect on the character.

### Building materials

Retaining or recycling local building materials, rather than replacing them with modern substitutes which may originate from outside the region, helps to preserve a 'sense of place'. The principle when choosing building materials and claddings for repairs or for extensions should be as far as possible to replicate the original materials.

### Stone and brick

In south Wales, terraces were often built with the local Pennant stone, sometimes taken from the coal measures of the deep mines. Roughly dressed stones were often used at the corners of the walls and in the window and door surrounds. From the late eighteenth century onwards, brick from local works was increasingly used for these architectural features, and for flues and chimneys because of their better fireproofing qualities. After 1850 or so,



*Top: Weithiau mae lle i ymestyn ar ben teras. Adeiladwyd yr estyniad hwn gan ddefnyddio deunyddiau tebyg a'r un cynllun ffenestr â'r rhes. Uchod: Crëwyd y dyddiad ar y tai hyn yn Nhreffynnon mewn bric gyferbyniol.*

*Top: Sometimes there is space to extend at the end of a terrace. This extension has been built using similar materials and the same style of window as the row. Above: The date on these houses at Holywell was created in contrasting brick.*



*Top: Cafodd sorod copr ei ymgorffori yn waliau gerddi y tai hyn yn Abertawe. Uchod: Pan foderneiddiwyd y tai, cadwyd waliau'r gerddi.*

*Top: Copper slag was incorporated in the garden walls of these houses in Swansea. Above: When the houses were modernized, the garden walls were preserved.*

lledaenodd y rheilffyrdd yn gyflym drwy dde Cymru a'r Cymoedd ac roedd dewis helaethach o friciau ar gael; ychwanegwyd y briciau melyn a glas at y briciau coch a brown gwreiddiol a wnaed o glai lleol. Roedd bellach yn fwy darbodus defnyddio briciau wrth adeiladu waliau strwythurol — er y'u gorchuddiwyd yn aml â charreg lanw neu rendr — ac ar gyfer paredau mewnol.

Defnyddiwyd briciau parod ar raddfa fasnachol yn draddodiadol yn y Canolbarth ac yn y Gogledd Ddwyrain o'r ddeunawfed ganrif ymlaen. Weithiau byddai briciau tywyll gwrthgyferbyniol yn cael eu mewnosod i waliau bric coch tai i greu patrymau. Roedd gweithgynhyrchydd briciau a nodwedddion addurniadol mawr yn ardal Rhiwabon, Wrecsam a gellid cludo ei gynnyrch yn rhwydd ar hyd y rheilffyrdd newydd yn yr ardal.

### Deunyddiau lleol ar gyfer addurno

Yng Nghwm Tawe, defnyddiwyd blociau sorod o'r gwaith copr yn aml ar gyfer cerrig nadd adeiladau ac ar gyfer capfeini ar waliau gerddi. Y traddodiad yn ardaloedd llechi'r Gogledd Orllewin oedd defnyddio blociau a thrawstiau llechfaen ar gyfer cerrig nadd yn ogystal â charreg aelwyd, palmant a ffensio.

### Calch

Fel y rhan fwyaf o adeiladau traddodiadol, adeiladwyd y tai teras gan ddefnyddio mortar calch ar gyfer gosod cerrig a briciau a

the railways spread rapidly through south Wales and the valleys, and a wider choice of bricks was available — yellow and blue as well as the red and brown bricks from local clays. It was now economical for brick to be used for structural walls — though it was usually faced in rubble stone or rendered — and for internal partitions.

This wholesale use of manufactured brick had been the tradition in mid- and north-east Wales from the eighteenth century. On occasion, contrasting dark brick was inset into the red brick walls of houses to create patterns. There was a major manufacturer of pressed brick and ornamental features in Ruabon, Wrexham, whose products could be easily transported on the developing railway network.

### Local materials for detail

In the Swansea Valley, slag blocks from the copper works were frequently used for dressings on buildings and for cappings to garden walls. The tradition in the slate areas of north-west Wales was to use slate blocks and beams for dressings as well as doorsteps, flags and fencing.

### Lime

Terraced houses, in common with most traditional buildings, were built using lime mortar for stone and brick laying,

defnyddiwyd rendr o galch neu wyngalch yn aml ar gyfer gorchudd diddos ar y waliau allanol. Prin yw'r manau lle y deuir o hyd i galchfaen naturiol yng Nghymru (gan gynnwys gogledd Sir Drefaldwyn, de Morgannwg ac ardaloedd arfordirol Sir Benfro) ac roedd y broses o gludo calch wedi'i wneud yn rhy ddrud i'w ddefnyddio ar raddfa fawr cyn i'r camlesi gael eu hadeiladu ar ddiwedd y ddeunawfed ganrif. Roedd y twf mawr yn y defnydd o forter calch a gwyngalch drwy gydol y bedwaredd ganrif ar bymtheg yn golygu bod y gwaith o adeiladu anheddau yn fwy ymarferol a bod y dulliau o sicrhau bod yr adeiladau'n ddi-ddos wedi gwella'n ddirfawr.

Roedd gan nifer o resi rendr o galch neu wyngalch ond erbyn heddiw maent â cherrig heb eu gorchuddio. Os oes tystiolaeth yn dangos i'r waliau gael y driniaeth hon ar un adeg, yna mae'n bosibl ei hadnewyddu. Mae calch yn caniatáu i'r waliau anadlu ond yn eu gwneud yn ddi-ddos hefyd a gall helpu i atal problemau lleithder. Gall mortar a rendr sment fod yn niweidiol iawn i waith carreg a bric traddodiadol. Dylid hefyd osgoi rendr sych, cerrig chwipio neu garreg ffug.

Weithiau mae waliau yn cynnwys gwybodaeth ddefnyddiol am hanes y rhes. Mae newidiadau mewn uniadau plyg ac uniadau fertigol yn dangos sut yr adeiladwyd y rhes, ac mae'n bwysig cofnodi a chadw'r dystiolaeth hon wrth drwsio'r gwaith maen.

and lime-based render or limewash was often used to provide a weatherproof covering on external walls. Limestone occurs naturally in relatively few locations in Wales (including north Montgomeryshire, south Glamorgan and the coastal areas of Pembrokeshire) and transportation of lime had made it too costly for wholesale use before the canals were built at the end of the eighteenth century. The huge growth in use of lime mortar and limewash through the nineteenth century made the construction of dwellings more practical and external weatherproofing improved greatly.

Many rows that now have exposed stone walls once had limewash or lime render. If there is evidence that the walls once had this treatment, it is possible to renew it. Lime allows the walls to breathe while weatherproofing them and can help to prevent damp problems. Cement mortars and renders can be very damaging to traditional stonework and bricks; and dry-dash or spar render or imitation stone should also be avoided.

Sometimes walls contain useful information about the history of the row. Changes in coursing and vertical joints show how the row was built, and it is important to record and preserve this evidence when repairing the masonry.



*Top: Yng ngogledd Cymru defnyddiwyd llechi gwastraff yn aml. Uchod: Mae calch ar gael i atgyweirio tai yn y dull traddodiadol. Ceir cyngor ymarferol ar sut i'w ddefnyddio gan Cadw.*

*Top: In north Wales, slate waste was often put to use. Above: Lime is available for repairing houses in the traditional way. Practical advice on using it is available from Cadw.*



### Ffenestri a drysau

Roedd y rhan fwyaf o'r gwaith pren a ddefnyddiwyd yn y tai teras yn bren parod. Ar ddechrau'r bedwaredd ganrif ar bymtheg disodlwyd ffynonellau'r seiri coed lleol gan gyflenwadau a fewnforiwyd o'r Baltig. Weithiau defnyddid nodweddion anghyffredin megis fframiau ffenestri haearn o'r ffoundriau lleol yn nhai'r gwehyddion yn y Drenewydd. Byddai newid nodweddion mor bwysig â hyn yn effeithio'n sylweddol ar ymddangosiad allanol tŷ a gall copïo cynllun y ffenestri a'r drysau gwreiddiol pan fo angen eu hadnewyddu helpu i gadw cymeriad lleol.

### Nodweddion mewnol

Er mwyn diogelu'r stoc o dai teras yng Nghymru at ddefnydd domestig yn yr unfed ganrif ar hugain, mae'n anochel y bydd newidiadau mewnol yn digwydd. Fodd bynnag, mae nodweddion gwreiddiol fel y simnai, grisiau cerrig troellog, cypyrddau a pharedau â phaneli yn mynd yn brin a gallent ychwanegu at werth y tŷ. Mae llawr carreg yn bwysig o ran cymeriad. Dylai maint unrhyw estyniadau cefn neu estyniadau eraill fod yn gydnaws â maint y tŷ.

### Windows and doors

Most of the timberwork used in terraced housing was prefabricated. In the early nineteenth century, local carpentry gave way to joiner-made windows and doors made from timber imported from the Baltic. Sometimes unusual features are found, like the iron-framed windows from local foundries in the weavers' houses at Newtown. Changing such important features substantially affects the external appearance of a house, and copying the original style of windows and doors when they have to be replaced can help to preserve local character.

### Internal features

To keep the stock of terraced housing in Wales in domestic use in the twenty-first century, some internal change is inevitable. However, original features such as chimney-breasts, turning stone stairs, panelled cupboards and partitions are becoming scarce and may add to the value of the house. Stone floors are important for character. The scale of rear or other extensions should be in keeping with the size of the house.



*Gyferbyn: Yn y rhes hon o dai gweithwyr yn Ffynnon Taf yn ne Cymru mae rhai o'r ffenestri gwreiddiol wedi goroesi. Gwnaed ffenestri newydd gan ddilyn y cynllun gwreiddiol. Top: Ffenestr wreiddiol yn y terras yn Ffynnon Taf. Uchod: Mae ffenestri a wnaed yn lleol yn nodwedd ar dai gwehyddwyr yn y Drenewydd.*

*Opposite: In this row of workers' houses at Taff's Well, in south Wales, some of the original windows survive. Replacements have been made in the original style. Top: An original window in the terrace at Taff's Well. Above: Locally made windows are a feature of the weavers' houses at Newtown.*



Top: Mae'r amrywiadau naturiol mewn lliw ac ansawdd y llechi wedi cynyddu drwy drwsio ac atgyweirio dros y blynyddoedd. Uchod: Cwteri wedi'u gosod yn y wal yn y ffordd draddodiadol, trwy ddefnyddio sbigynnau.

Top: The natural variations in colour and texture of slate are increased by patching and mending over the years. Above: Guttering fixed with spikes into the wall, in the traditional way.

### Toeau

Mae toeau rhesi teras wedi'u gwneud o lechi Cymreig yn nodweddiadol — yn bennaf o chwareli Gwynedd ond hefyd o gloddfeydd yn y Preselau. Mae gan lechi o Gymru liw ac ansawdd rhanbarthol arbennig ac mae eu cadw yn hytrach na defnyddio cynnyrch modern wedi'i wneud gan ddyd yn helpu i gadw cymeriad lleol.

Ceir amrywiadau rhanbarthol yng nghynllun y toeau hefyd. Yn nodweddiadol yng nghymoedd Sir Forgannwg, mae toeau yn camu i fyny neu i lawr o un tŷ i'r nesaf yn y rhes. Fodd bynnag, yn Sir Fynwy, mae tuedd tuag at oledd parhaus dros res i fyny neu i lawr y rhiw, a gwelir hyn hefyd yn y Gogledd Orllewin er enghraifft yn Neiniolen a Phorth-y-nant. Mae gan rhai hen doeau lechi mawr trwchus wedi'u gosod mewn haenau sy'n lleihau mewn maint o'r bargodion i'r crib. Wrth ailosod llechi dylid didoli ac aildefnyddio'r llechi hyn lle bo'n bosibl.

Mae byrddau ar y bargodion bellach yn gyffredin er mwyn gosod cyfarpar dŵr glaw ond nis defnyddiwyd yn y gorffennol. Pan ddefnyddid cwteri fe'u gosodid yn syth ar y wal neu ar waelod trawstiau'r to drwy ddefnyddio bracedi.

### Roofs

Roofs of terraced rows are characteristically made of Welsh slate, mostly from the Gwynedd quarries but also from sources in the Preseli Hills. Welsh slate has distinctive regional colouring and texture and retaining it, rather than replacing it with modern man-made products, helps to keep local character.

There are also regional variations in the design of roofs. Typically, in the Glamorganshire valleys, roofs step up or down from one house to the next in the row. However, in Monmouthshire there is a preference for continuous slopes over an uphill or downhill row, and this is found also in north-west Wales, for example at Deiniolen and Porth y Nant. Some very old roofs have large thick slates, laid in courses that reduce in size from the eaves to the ridge. When reslating a roof these slates should be sorted and reused if possible.

Eaves boards have become commonplace for attaching rainwater goods, but these were not used in the past. Where guttering was used, it was simply supported on brackets spiked into the wall or fixed to the rafter ends.

## Cadw ac Addasu: Crynodeb o Arfer Da

### Cyffredinol

- Gall fod angen caniatâd cynllunio os bwriedir newid defnydd (neu adfer defnydd cynharach).
- Bydd angen caniatâd adeilad rhestredig yn ogystal â chaniatâd cynllunio ar dŷ teras sydd wedi'i rhestru, naill ai fel adeilad unigol neu fel rhan o res, fel adeilad o ddiddordeb pensaernïol neu hanesyddol arbennig, ar gyfer gwaith a fyddai'n effeithio ar ei gymeriad arbennig.
- Dynodir ardaloedd cadwraeth gan awdurdodau lleol. Dylid trafod gwaith ar dŷ mewn ardal gadwraeth gyda'r swyddog cadwraeth yn yr adran gynllunio leol.
- Hyd yn oed lle nad oes angen caniatâd cynllunio, dylid ceisio cyngor arbenigol. Mae'n bosibl cadw cymeriad tra'n bodloni rheoliadau adeiladu hefyd.
- Cyn ymgymryd ag unrhyw waith addasu neu drwsio, dylid sicrhau bod cofnod manwl o'r gwreiddiol.

## Conservation & Adaptation: Summary of Good Practice

### General

- A proposed change of use (or the reinstatement of an earlier use) may require planning permission.
- A terraced house which is listed either as an individual building, or as part of a row, as of special architectural or historic interest, will require listed building consent in addition to planning permission for works that would affect its special character.
- Conservation areas are designated by local authorities. Work to a house in a conservation area should be discussed with the conservation officer in the local planning department.
- Even when planning permission is not required, specialist advice is advisable. It is possible to retain character while also satisfying building regulations.
- Before undertaking any work of alteration or repair, ensure that the original is carefully recorded.



*Top: Gellir addasu tai sydd yn rhy fach ar gyfer bywyd modern at ddibenion eraill (gyda chaniatâd cynllunio). Uchod: Mae nodweddion mewnol gwreiddiol fel y llawr llechi hwn yn brin iawn (Amgueddfa ac Oriol Gelf Castell Cyfarthfa, Merthyr Tudful).*

*Top: Houses that are too small for modern living may be adapted for other uses (with planning permission). Above: Original interior features such as this slate floor are increasingly rare (Cyfarthfa Castle Museum & Art Gallery, Merthyr Tydfil).*



*Uchod: Cafwyd cymorth grant i atgyweirio'r tai hyn yn Rhiwabon, Wrecsam, fel rhan o Bartneriaeth Cynllun Trefi.*

*Above: The repair of these houses in Ruabon, Wrexham, was grant-aided as a Town Scheme Partnership.*

## Mewnol

- Ceisio cadw'r nodweddion gwreiddiol megis lleoedd tân, grisiau a dodrefn gosod.
- Cadw'r gorffeniadau mewnol megis waliau wedi'u plastro, gwaith coed wedi'i baentio a lloriau cerrig.

## Allanol

- Cadw patrwm a graddfa wreiddiol drysau a ffenestri ac osgoi ychwanegu rhai newydd.
- Cadw o fewn ôl troed gwreiddiol yr adeilad lle bo hynny'n bosibl. Pan ychwanegir estyniadau, dylent gael eu hadeiladu yn gymesur â'r adeilad gwreiddiol.
- Cadw'r llinell doeau a'r simnai wreiddiol.
- Cadw tystiolaeth o ddiben gwreiddiol y tai allan a ddefnyddir at ddibenion domestig.
- Trwsio yn hytrach na gosod darn newydd. Os yw darn newydd yn angenrheidiol, defnyddiwch ddeunyddiau traddodiadol a chopiwch y cynllun gwreiddiol lle bynnag y bo'n bosibl.
- Parchu'r y modd y cafodd y deunyddiau eu defnyddio a'u gorffennu.
- Gofalu am yr holl fanylion, yn enwedig nodweddion anghyffredin neu ddeunyddiau adeiladu.

## Internal

- Try to retain original features such as fireplaces, staircases and built-in furniture.
- Keep the internal finishes such as plastered walls, painted timberwork and flagged floors.

## External

- Keep the original pattern and scale of doors and windows and avoid adding new ones.
- Keep within the original footprint of the building wherever possible. When extensions are added, they should be built in proportion with the original building.
- Retain the original roof-line and chimney.
- Preserve the evidence for the original purpose for outbuildings that are brought into domestic use.
- Repair rather than replace. If replacement is necessary, use traditional materials and copy the original design whenever possible.
- Respect the way materials were used and finished.
- Look after all the detail, especially unusual features or building materials.



## Ffynonellau cymorth grant *Sources of grant-aid*

- Mae cynlluniau grant Cadw yn cwmpasu adeiladau mewn ardaloedd cadwraeth ac adeiladau unigol (nad ydynt wedi'u rhestru o reidrwydd) o ddi-ddordeb eithriadol.
- Mae gan rai cynghorau lleol gynlluniau grant ar gyfer adeiladau hanesyddol a dylech gysylltu â'r cyngor lleol am gyngor.
- Mae cronfeydd ar gael i ymddiriedolaethau cadwraeth adeiladau gwirfoddol nad ydynt ar gael i berchenogion preifat. Mae Cymdeithas Ymddiriedolaethau Cadwraeth y DU yn cynnig cymorth a chyngor. Mae'r Gronfa Dreftadaeth Bensaernïol yn rhoi cyngor yn ogystal â grantiau a benthyciadau i ymddiriedolaethau, ond nid i berchenogion preifat.
- Partneriaethau Cynlluniau Trefi: Mae Cadw ac awdurdodau lleol yn dyrannu arian ar y cyd am dair blynedd ar gyfer trwsio adeiladau o fewn ardal ddiffiniedig o fewn yr awdurdod lleol. Y nod yw adfer ymddangosiad trefluniau ac annog adfywiad. Gallai'r canllawiau cynllunio a baratoir ar gyfer y fath gynlluniau fod yn ddefnyddiol ar gyfer prosiectau eraill.
- Cynlluniau Atgyweirio Grŵp Deddf 1990: mewn partneriaeth ag adrannau tai awdurdodau lleol a chymdeithasau tai, gall Cadw roi cymorth grant i adeiladau yn yr ardal ddynodedig.
- Cadw's grant schemes cover buildings in conservation areas, and individual buildings (not necessarily listed) of outstanding interest.
- Some local councils have grant schemes for historic buildings and you should contact the local council for advice.
- Voluntary building preservation trusts have access to funds that are not available for private owners. The UK Association of Preservation Trusts provides support and advice. The Architectural Heritage Fund gives advice as well as grants and loans to trusts, though not to private owners.
- Town Scheme Partnerships: Cadw and local authorities jointly allocate funds for three years for the repair of buildings within a defined area within the local authority. The aim is to restore the appearance of historic townscapes and to encourage regeneration. The design guides prepared for such schemes may be helpful for other projects.
- 1990 Act Group Repair schemes: in partnership with local authorities housing departments and housing associations, Cadw may grant-aid buildings in the designated area.



*Uchod: Cafwyd cymorth grant i atgyweirio'r tai hyn yng ngardd bentref Pontywaun fel rhan o Bartneriaeth Cynllun Trefi.*

*Above: Houses at Pontywaun garden village were repaired with grant-aid as part of a Town Scheme Partnership.*



*Uchod: Atgyweiriwyd y tai yn ardal Lower Dock Street, Casnewydd, fel rhan o Fenter Treftadaeth Trefluniau.*

*Above: Houses in the Lower Dock Street area of Newport have been repaired as part of a Townscape Heritage Initiative.*

## Ffynonellau cyngor

- **Cadw**  
Plas Carew, Uned 5/7, Cefn Coed,  
Parc Nantgarw, Caerdydd CF15 7QQ  
Ffôn 01443 336000  
[www.cadw.cymru.gov.uk](http://www.cadw.cymru.gov.uk)  
Mae cyngor cyffredinol am dai teras a sut i ofalu amdanynt ar gael oddi wrth staff Cadw yn uniongyrchol. Mae cyhoeddiadau cynghorol ar gael ar y wefan.
- **Swyddogion cadwraeth Awdurdodau Cynllunio Lleol**  
Gall swyddogion cadwraeth gynghori ar ganiatâd cynllunio, caniatâd adeilad rhestredig, ardaloedd cadwraeth a thraddodiadau adeiladu lleol.
- **Comisiwn Brenhinol Henebion Cymru**  
Adeilad y Goron, Plas Crug,  
Aberystwyth SY23 1NJ  
Ffôn 01970 621200 [www.rcahmw.org.uk](http://www.rcahmw.org.uk)  
Mae CBHC yn yn arolygu, dadansoddi a chofnodi adeiladau hanesyddol ac yn trefnu bod gwybodaeth ar gael i'r cyhoedd.
- **Amgueddfa Werin Cymru**  
Sain Ffagan, Caerdydd CF5 6XB  
Ffôn 029 2057 3500  
Mae gan staff brofiad ymarferol ym maes cadwraeth adeiladau traddodiadol a thechnegau crefftiau.
- **Amgueddfeydd lleol**  
Efallai bod gan wasanaethau amgueddfeydd lleol wybodaeth am adeiladau a thechnegau adeiladu lleol.

## Sources of advice

- **Cadw**  
Plas Carew, Unit 5/7, Cefn Coed,  
Parc Nantgarw, Cardiff CF15 7QQ  
Tel 01443 336000  
[www.cadw.wales.gov.uk](http://www.cadw.wales.gov.uk)  
General advice about terraced houses and how to care for them is available direct from Cadw staff. Advisory publications are available on the website.
- **Local Planning Authority conservation officers**  
Conservation officers can advise on planning consents, listed building consent, conservation areas, and local building traditions.
- **Royal Commission on the Ancient and Historical Monuments of Wales**  
Crown Building, Plas Crug,  
Aberystwyth SY23 1NJ  
Tel 01970 621200 [www.rcahmw.org.uk](http://www.rcahmw.org.uk)  
RCAHMW surveys, interprets and records historic buildings and makes information available to the public.
- **Museum of Welsh Life**  
St Fagans, Cardiff CF5 6XB  
Tel 029 2057 3500  
Staff have practical experience in the conservation of traditional buildings and craft techniques.
- **Local museums**  
Local museum services may have information on local buildings and building techniques.

© Cadw  
Plas Carew  
Uned 5/7 Cefn Coed  
Parc Nantgarw  
Caerdydd CF15 7QQ

Cyhoeddwyd yn gyntaf gan Cadw 2005

ISBN 1 85760 226 9

© Cadw  
Plas Carew  
Unit 5/7 Cefn Coed  
Parc Nantgarw  
Cardiff CF15 7QQ

First published by Cadw 2005

ISBN 1 85760 226 9

© Cadw  
Plas Carew  
Uned 5/7 Cefn Coed  
Parc Nantgarw  
Caerdydd CF15 7QQ

© Cadw  
Plas Carew  
Unit 5/7 Cefn Coed  
Parc Nantgarw  
Cardiff CF15 7QQ