

BNPB1: Plasterboard - industry, product and market overview

Version 1.2

This Briefing Note and referenced information is a public consultation document and will be used to inform Government decisions. The information and analysis form part of the Evidence Base created by Defra's Market Transformation Programme.

1 Summary

Evaluating plasterboard as a product requires an understanding of:

- The typical applications of the product.
- Plasterboard composition in terms of materials and proportion.
- Industry structure.
- Current markets and trends.
- Market projection.

This Briefing Note presents an overview of the plasterboard industry, product and market.

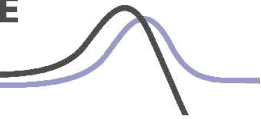
2 Product application

The domestic, commercial and industrial construction sectors all use plasterboard. In the domestic sector, the use of plasterboard in housing has increased as construction companies move away from brick buildings to timber and steel framed buildings (dry-lined plaster which has been the trend in the USA for the last 15 years). In Europe, the use of plasterboard has tripled in the past 25 years from 25% to 76% of all gypsum-based building products^[1]. Instead of bricks screened with wet plaster, the current trend is to build the frame in timber or steel, fill the cavity with mineral wool (ie rock or glass mineral wool) insulation and seal it internally with plasterboard. In the UK, this is being driven by several factors^[2]:

- Lack of skilled plasterers.
- Cheaper to construct.
- Quicker to construct.
- Compliance with Building Regulations Part E (Acoustic), Part L (Thermal) and Part B (Fire).
- A plasterboard based lining system replaces some of the underlying structure.

^[1] Personal communication.

^[2] Personal communication with Gypsum Products Development Association (GPDA).



Gypsum plasterboards are selected according to their type, size, thickness and edge profile, and also availability and cost. If a particular board is unavailable, its use may be substituted by a different type of board. The basis upon which many plasterboard contracts are won is the cost of supply and, more recently, supply net of disposal cost (where disposal costs are taken into consideration when purchasing materials). Increasingly, when choosing their supplier, companies are taking into consideration whether the scrap plasterboard can be returned to and recycled by the plasterboard manufacturer.

In the UK, the most common plasterboard product dimensions are:

- Thickness - 9.5 mm and 12.5 mm
- Width - 900 mm and 1200 mm
- Length - most common lengths are 1800 mm, 1829 mm (6 ft), 2400 mm and 2438 mm (8 ft).

The cheapest board suitable for a range of domestic and commercial situations where fire resistance and sound insulation are not an issue is 9.5 mm plasterboard, which was the most widely used but is now being replaced by 12.5 mm boards to comply with tightening Building Regulations.

The long-term consumer demand for higher levels of sound resistance and changing building types are likely to drive up board weights in terms of mass per unit area.

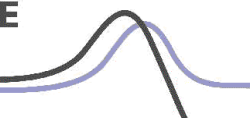
In England and Wales, the Government has strengthened the Building Regulations for sound insulation. Robust Details (constructions which avoid the need for further testing under the revised Building Regulations Part E Acoustic) do not allow the use of 9.5 mm wallboards. Neither Scotland nor Northern Ireland has adopted these Robust Solutions, but markets for higher performance products are rising.

Plasterboard can be referred to in a number of ways, reflecting the make-up of that particular type of plasterboard. The following terms are often used^[3]:

- *Baseboard* - plasterboard faced on both sides with grey liner paper. Grey liner paper is normally given a gypsum plaster finish.
- *Wallboard* - plasterboard faced on one side with grey liner paper and on the other with ivory liner paper. Ivory liner paper is suitable for direct decoration.
- *Lath* - name given to plasterboard of 400 mm or 600 mm width only.
- *Plank* or core board - plasterboard with a minimum thickness of 19 mm.

The performance characteristics of plasterboard make it particularly suitable for use in situations requiring fire protection, sound and thermal insulation. It is used extensively in domestic and commercial buildings as an internal lining for walls, internal partitioning within buildings and as a ceiling and roof lining material. Various fixing methods can be applied (eg nailing, screwing or sticking with gypsum-based or other adhesives). The boards also find use in suspended ceiling systems.

^[3] Plasterboard: A report on the supply of plasterboard in the United Kingdom, www.competition-commission.org.uk/rep_pub/reports/1990/full



3 Product composition

Gypsum and anhydrite are the hydrated and anhydrous forms of calcium sulphate. Calcium sulphate dihydrate constitutes approximately 93% of plasterboard with 6% paper and 1% other materials^[4]. The paper surface and core vary according to the board application. The core may contain additives to impart additional properties. Minor additives include starch (bonding agent), foaming agents and dispersants. For example^{[5][6]}:

- Moisture-resistant boards and core board contain a silicone and/or wax additive.
- Fire-resistant boards and core board may include small quantities of glass fibre and vermiculite.
- Foil-backed boards are backed with a metallised polymer film.
- Industrial-grade boards are faced with a polyvinylchloride film.

The liner paper used in gypsum board manufacture tends to be made from 100% recycled paper. Key types of feedstock used are newspapers and corrugated cartons^[7]. The standard, good and best levels of recycled content of plasterboard, according to WRAP, are given in Table 1.

It should be noted that the figures stated in Table 1 include FGD gypsum as well as recycled gypsum derived from waste plasterboard. As discussed later, a significantly lower contribution is made by waste plasterboard to the recycled content.

Table 1 Recycled content of plasterboard^[8]

Product	Recyclate content (as a % of mass)		
	Standard	Good	Best
Plasterboard	36	84	98

4 Sources of gypsum

Sources of calcium sulphate currently utilised in the manufacture of plasterboard come from mines, synthetic gypsum (desulfogypsum) from power plants, post-industrial scraps and a very small percentage from post-consumer construction projects.

British Gypsum (BG), a subsidiary of BPB plc, is the only UK producer of mined gypsum. Production data are thus confidential. Estimates from the British Geological Survey, however, suggest that 1.7 million tonnes/year of gypsum are being produced

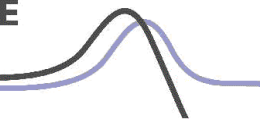
^[4] Personal stakeholder communications (GRUK, NW Gypsum, Lafarge).

^[5] British Gypsum Gyproc plasterboard datasheet.

^[6] Knauf Drywall Health & Safety datasheet.

^[7] Knauf website, www.knauf.co.uk

^[8] Opportunities to use recycled material in building: Reference guide, WRAP, September 2004.



by BG from the operation of six mines and one quarry in Cumbria, Nottinghamshire, Leicestershire, Staffordshire and East Sussex.

Substantial amounts of synthetic gypsum, sourced since 1994, have contributed significantly to the decline of mined gypsum. This gypsum is a by-product called desulfogypsum and results from the emissions cleaning process, flue gas desulphurisation (FGD), at power stations. This cleaning is carried out using a finely ground limestone which reacts with sulphur dioxide emissions to produce a very pure gypsum. The synthetic gypsum has a higher purity, 96% gypsum, than natural gypsum, typically 80% gypsum, although higher purity natural gypsum does occur in England.

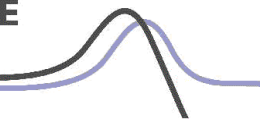
Desulfogypsum is produced by three coal-fired power stations in West Burton, Ratcliffe-on-Soar and in North Yorkshire, the largest station and owned by Drax Power Ltd. These power stations sell synthetic gypsum to the gypsum companies, reducing the need for naturally mined gypsum. BG confirms its exclusive purchasing rights to synthetic gypsum from the Drax (Drax Power Ltd), Ratcliffe (Powergen) and West Burton (EDF) power stations. The use of synthetic gypsum has grown strongly. Continued use may be dependent upon the types of power station operating in the future. No coal-fired power stations have been built in the past 30 years and the long-term future of coal-fired electricity generation is uncertain. Imported and home-produced gypsum and desulfogypsum (often referred to as FGD are used by plasterboard manufacturers in the UK. The cost of FGD in the UK is low, much cheaper than the cost of importing raw materials from Europe. It has been suggested that increasing the cost of UK FGD would make the installation of more FGD scrubbers financially attractive and lead to a decreased cost in electricity generation. The delivery cost of FGD does not, however, take into account the additional energy required to dry the material for processing. This needs to be considered from both an economic and environmental perspective. In the short to medium term, supplies of synthetic gypsum will increase as there are FGD plant installations planned for several more coal-fired power stations.

Post-industrial scrap is being processed and used in the production of plasterboard. The recycled content of plasterboards is currently said to be typically 2.5%, but this is growing. This could feasibly reach 33% if there was the corporate will to develop the collection and processing infrastructure to support a recycling industry. A very small amount of post-consumer plasterboard waste, from the construction of new-build projects, is currently being collected, including the take-back schemes offered by Lafarge Plasterboard and British Gypsum.

The only current known UK and accepted end market for the waste is its recycling back into plasterboard. Recycled product is incorporated into new board, although there has been debate amongst stakeholders over whether all the post-consumer plasterboard waste collected has been incorporated back into the production of plasterboard. Investigations into other end markets are being conducted, predominantly by WRAP.

5 Industry stakeholder structure

The supply chain for the use of plasterboard products includes:



- Clients, architects, designers, project managers.
- The manufacturer which produces the product and reprocesses its waste plasterboard back into plasterboard.
- Suppliers or builders' merchants which supply plasterboard to certain users (eg dry-lining subcontractors).
- Main construction contractors which are usually responsible for waste management on sites, including the collection and segregation of plasterboard.
- Sub-contractors which are responsible for installing plasterboard products and are the major waste producers of new plasterboard products.
- Refurbishment contractors which may generate plasterboard waste from the plasterboard products they are removing and also create waste from new plasterboard being installed.
- Demolition contractors removing plasterboard during the deconstruction or demolition of a building.
- Waste managers which are responsible for collecting, segregating and either recovering or disposing of plasterboard waste to landfill. Waste managers can also be reprocessors. Some reprocessors do not provide containers or haulage as part of their service.
- Landfill operators.

6 Manufacturers

High purity gypsum is used in the production of plaster moulds (pottery, surgical and dental works), confectionary, food, pharmaceuticals cat litter, in the brewing industry, in sugar beet refining and as oil absorbents^[9]. The most important application, using the largest market share of gypsum, is in the production of plasterboard for the construction industry. About 60% of the gypsum consumed in the UK is used in the manufacture of plasterboard (around 3 million tonnes of 5 million tonnes consumed)^[10]. There are three plasterboard producers in the UK: British Gypsum, Knauf and Lafarge, and together they constitute ten production lines in the UK. All three companies plan to expand their operations^[11].

Table 2 Plasterboard manufacturers

Manufacturer	Approx market share	Production	Location
Lafarge Plasterboard Ltd	20%	2 lines – 50 million m ²	Bristol, South West
Knauf Drywall	20%	2 lines – 70 million m ²	Sittingbourne, South East Immingham, Yorkshire and Humberside
British Gypsum	60%	6 lines – 150 million m ²	Cumbria, North West North Yorkshire, Yorkshire and Humberside Leicestershire x 2, East Midlands East Sussex, South East

^[9] British Geological Survey Gypsum Factsheet.

^[10] WRAP report, January 2006. Review of Plasterboard Material Flows and Barriers to Greater Use of Recycled Plasterboard.

^[11] ENDS Report, May 2005.

7 Contractors and specialist subcontractors

In a construction project, the main contractors can use either their own plasterers/dryliners or a specialist subcontractor. Depending on the contract, either party can be responsible for the purchase of the plasterboard and waste produced.

8 Plasterboard waste managers

The majority of post-consumer plasterboard is currently being sent to landfill. Owing to the recent waste acceptance criteria (WAC) introduced on 16th July 2005, high sulphate content products, including plasterboards, have to be segregated for recycling or disposed of in mono-cells at landfills. This has led to a rush of entrepreneurial activity to provide recycling services for plasterboard as there is a lack of mono-cells available in the UK, and the cost of landfill disposal in general is rising. At present, the key players in the field offering unique services are:

British Gypsum (BG)^[12]

British Gypsum has developed recycling schemes in partnership with some main contractors. It offers a take-back scheme and is planning to offer a recycling service where segregated plasterboard is transported by BG to a third party waste management company for hand-sorting before returning it to BG. During its development, the BG scheme focused on the waste plasterboard generated from new build by national housebuilders. In a continuing effort to develop its scheme, BG's facility has now been successfully extended to major commercial contracts and it plans to include regional housebuilders in the service. The bag-based collection service originally established has also been modified by the introduction of a skip-based collection option. BG will only take back BG plasterboard.

Gypsum Recycling UK Ltd (GRUK)^[13]

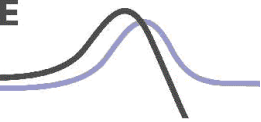
Gypsum Recycling UK Ltd is owned by the directors and shareholders of Gypsum Recycling International (GRI), a company which recycles plasterboard throughout Scandinavia, Europe and the USA. GRUK has been operational since April 2005 in England and works in conjunction with Knauf, with recycling facilities situated in Sittingbourne and Immingham. The company can provide containers and haulage if required. EA licences and planning permission have been granted at Sittingbourne since August 2005, and are currently being processed at Sheffield, Wiltshire and Teeside. As the reprocessing equipment is a mobile unit, plasterboard is stored in GRUK's depots until minimum tonnages are achieved before its equipment is dispatched to process the plasterboard waste.

Lafarge Plasterboard Ltd

Lafarge Plasterboard Ltd operates a recycling system with New West Gypsum at the Lafarge site in Bristol. Since mid-2005, customers have been offered a plasterboard recycling option. A third party waste management company transports the plasterboard directly to New West Gypsum (dependent on location) or to bulking stations where it is consolidated to minimise the number of vehicle movements. The plasterboard waste returned to Lafarge/NWG is all recycled.

^[12] Personal communication with BG.

^[13] Personal communication with GRI.



New West Gypsum (NWG)^[14]

NWG works with a recovery and haulage company, Materials Recovery Ltd (MRL), which provides a 'from site' waste collection service. MRL provides containers and haulage, taking plasterboard waste to an independent transfer station where it is sorted by hand before being transported to NWG. This is not an exclusive partnership and NWG will accept and process waste material delivered by any waste recovery firm. NWG reprocesses plasterboard waste at its two facilities: the Lafarge facility in Bristol and the Knauf facility in Immingham, using technology brought over from Canada. Capacities are estimated to be approximately 75,000 tonnes/year per site.

Plasterboard Recycling UK (PBR:UK)^[15]

PBR:UK is offering a UK-wide waste plasterboard collection service with a fixed tonnage cost including provision of skips and haulage. PBR:UK currently operates out of facilities in North London and near Grantham in Lincolnshire. It accepts all the different types of plasterboard waste arising and from any manufacturer. Current throughput capacity for its two operations totals 4,000 tonnes per month. PBR:UK has developed its own proprietary equipment to recycle the waste and plans to continue to undertake research and development into alternative end uses for the recovered gypsum and paper. It is actively seeking partners in the fertiliser and cement industries to take recycled gypsum. The company aims to achieve a capacity of up to 100,000 tonnes of recycled plasterboard per year through the establishment of a network of plasterboard recycling centres across the UK.

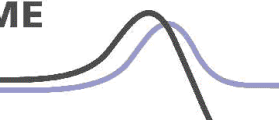
Roy Hatfield^[16]

Roy Hatfield is a company that has been recycling industrial residues since the 1970s. It has several years' experience of recycling waste gypsum residues and has now developed a specialised plant to recycle plasterboard waste. The company's systems are capable of recycling fines, dust and wet cake from gypsum/calcium sulphate generating industries and successful trials carried out during 2005 have produced recycled raw materials for industry. It has completed its plant development programme and is able to accept and recycle around 1,000 tonnes of waste plasterboard per week from construction and demolition sites. Its current practice uses waste contractors from all over the UK to collect, sort and bulk wastes before they are transferred to the processing site. Various plasterboard types, with additives, foil or foam-backed, are accepted provided they have been kept separate from standard plasterboard material. All of the waste plasterboard has to be reasonably dry to be processed. As a result of end markets established by the company, none of the waste gypsum recycled is deposited to landfill.

^[14] Personal communication with NWG.

^[15] Personal communication with PBR:UK.

^[16] Personal communication with Roy Hatfield.



9 Current markets and trends

Table 3 UK plasterboard production (000 m²)^[17] ^[18]

	1998	1999	2000	2001	2002	2003	2004	2005
Volume	403,826	421,643	425,000	430,000	433,000	240,352	255,602	269,842
Increment yr on yr	10,965	178,17	3,357	5,000	3,000	-	-	-
% Increment	2.79	4.41	0.78	1.18	0.7	-	-	-

Table 4 UK plasterboard consumption (000 m²)^[19] ^[20]

	1998	1999	2000	2001	2002	2003	2004	2005
Volume	138,361	146,442	157,887	156,680	163,816	193,981	232,191	188,500
Increment yr on yr	-	8,081	11,445	-1,207	7,136	30,166	38,210	-
% Increment	-	5.84	7.82	-0.76	4.55	18.41	19.70	-

Table 5 UK net export and import of plasterboard (000 m²)^[21]

	1997	1998	1999	2000	2001	2002	2003	2004
Import	3,403	17,007	6,429	9,775	8,065	12,130	33,066	56,603
Export	9,519	11,266	6,601	10,525	7,687	9,365	10,626	15,572
Net Import	-6,116	5,741	-172	-750	378	2,765	22,440	41,031

Table 6 Five main countries exporting plasterboard to the UK (1998)

Country	Quantity (000 m ²)	Quantity (%)
Ireland	4,188	28.35
Germany	2,557	17.31
Denmark	1,872	12.67
USA	1,731	11.72
Netherlands	1,392	9.42

^[17] Gobi International Report on Plasterboard. These reports supply the user with as much available statistical information on a market as is possible. For the user's convenience, estimates and forecasts have been made to fill gaps in the data.

^[18] ENTEC 2006 EU ETS final client report: Gypsum – Phase ii benchmark review. For 2003-2005 production figures.

^[19] ONS 2005, UK Product Sales and Trade Statistics 2000, 2001 and 2004: Plaster Products for Construction Purposes (PRA 26620).

^[20] GDPA DTi consultation on the EU ETS Phase ii CO₂ emissions projections. Feb. 2006. For 2005 consumption figures.

^[21] ONS 2005, UK Product Sales and Trade Statistics 2000, 2001 and 2004: Plaster Products for Construction Purposes (PRA 26620).

Table 7 Five main countries importing plasterboard from the UK (1998)

Country	Quantity (000 m ²)	Quantity (%)
Ireland	15,819	31.24
Germany	11,293	22.3
France	6,215	12.27
USA	3,559	7.03
Japan	2,383	4.71

10 Market projections

An estimation of plasterboard consumption and waste generation from new build in the future, up to the year 2020, has been made and is presented in Table 8. These figures have been calculated based on data from several sources and a number of assumptions.

Data used and assumptions made:

- UK plasterboard consumption from 1997-2004 as indicated in Table 4.
- Dwelling completions up to 2006 taken from DCLG statistics.
- Forecasts^[22] of annual growth in dwelling completions 2004-2008 (5% per annum) have been used for 2007-2008.
- Plasterboard consumption according to ONS statistics and industry figures.
- Dwelling completions will grow annually by 3% post-2008. (Historically, the trend in annual completions has fluctuated up and down^[23]. It is assumed 5% annual growth is likely to average at 3% per year over the longer term.)
- From known plasterboard consumption and dwelling completion figures (1997-2004), an average consumption per dwelling has been calculated.
- Industry prediction of plasterboard consumption growth for 2006 to 2012 will be 10.6% per year.
- To predict the likely future consumption of plasterboard, an average of the plasterboard consumption per dwelling completion for the past five years (2000-2004) has been calculated and used as a reference value for 2013 to the year 2020. This reference value has enabled the total plasterboard consumption to be calculated based on the projected dwelling completions of 3% growth per year.
- 12%^[24] of plasterboard during installation in new build is wasted.
- Current methods of construction and consumption are used. Growth in plasterboard usage from new methods of construction has not been assumed.

It should be noted that the figures in Table 8 do not take into account plasterboard product waste from demolition and refurbishment activities. Data on the amount of waste generated from these activities need to be ascertained. The total amount of

^[22] AMA Research Ltd. UK Housebuilders Market 2005. Focus on Doors, Windows and Roofline Products. Fifth Edition. May 2005.

^[23] ODPM housing statistics www.odpm.gov.uk

^[24] BRE waste audits and stakeholder communication.

plasterboard waste produced per annum, including new build, demolition and refurbishment, will be much higher than the estimates calculated here.

Figure 1 ODPM statistics on permanent dwelling completions 1990-2004

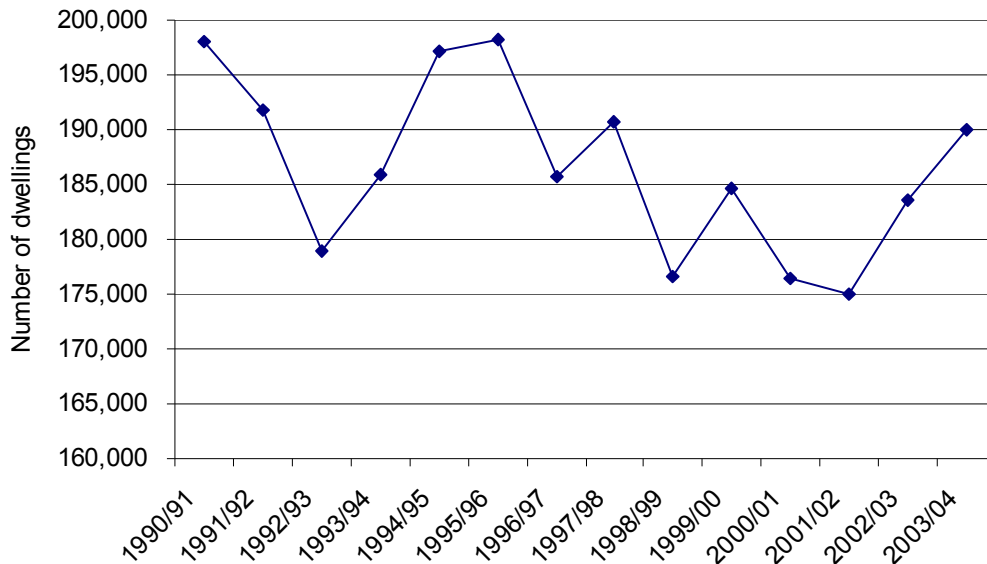
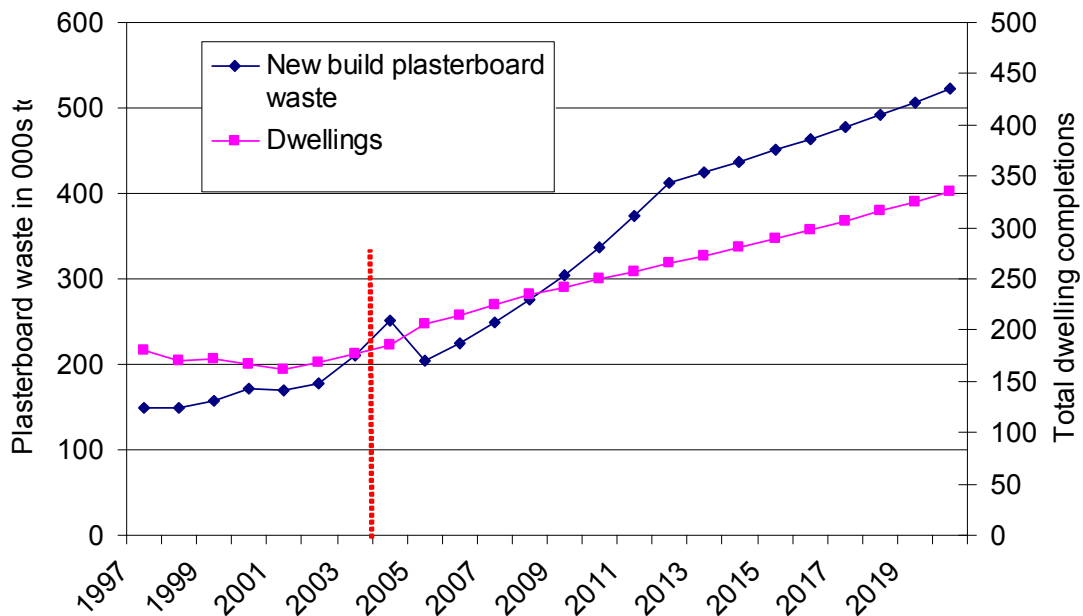


Figure 2 Predicted consumption of plasterboard in new-build housing construction (1997-2020)



Note. The dotted red line indicates where data from forecasted (Fst) information and assumptions start.

Table 8 UK dwelling completions, plasterboard consumption and waste generation (1997-2020)

Year	Total dwelling completions	plasterboard consumption	plasterboard per dwelling completion	plasterboard waste from new build @12% offcuts
	000's	000 tonnes	000 tonnes/dwelling	000 tonnes
1997	181		0	149
1998	170	1245	7	149
1999	173	1318	8	158
2000	167	1421	8	171
2001	162	1410	9	169
2002	169	1474	9	177
2003	176	1746	10	209
2004 Est	185	2090	11	251
2005 Fst	205	1697	9	204
2006 Fst	215	1876	9	225
2007 Fst	225	2075	9	249
2008 Fst	235	2295	9	275
2009	242	2538	9	305
2010	249	2808	9	337
2011	257	3105	9	373
2012	264	3434	9	412
2013	272	3537	9	424
2014	281	3643	9	437
2015	289	3753	9	450
2016	298	3865	9	464
2017	307	3981	9	478
2018	316	4101	9	492
2019	325	4224	9	507
2020	335	4350	9	522

A key aim of establishing and estimating the amount of plasterboard waste arising is to identify ways in which the volume going to landfill can be reduced. A WRAP report on plasterboard flows and barriers suggests the amount of gypsum waste from construction and demolition currently going to landfill is around 1 million tonnes/year^[25].

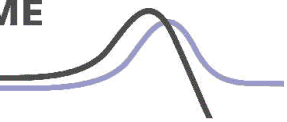
Three options that could reduce the amount of plasterboard waste going to landfill, and modelled here, are:

- Reducing the 10% rule for landfill disposal.
- Increasing the amount of plasterboard material taken back and recycled by manufacturers.
- Eliminating offcuts through design and purchasing pre-cut material.

These options are presented in Table 9 and have been modelled based on the following assumptions:

- Consumption figures are as indicated in Table 8.

^[25] WRAP report, January 2006. Review of Plasterboard Material Flows and Barriers to Greater Use of Recycled Plasterboard.



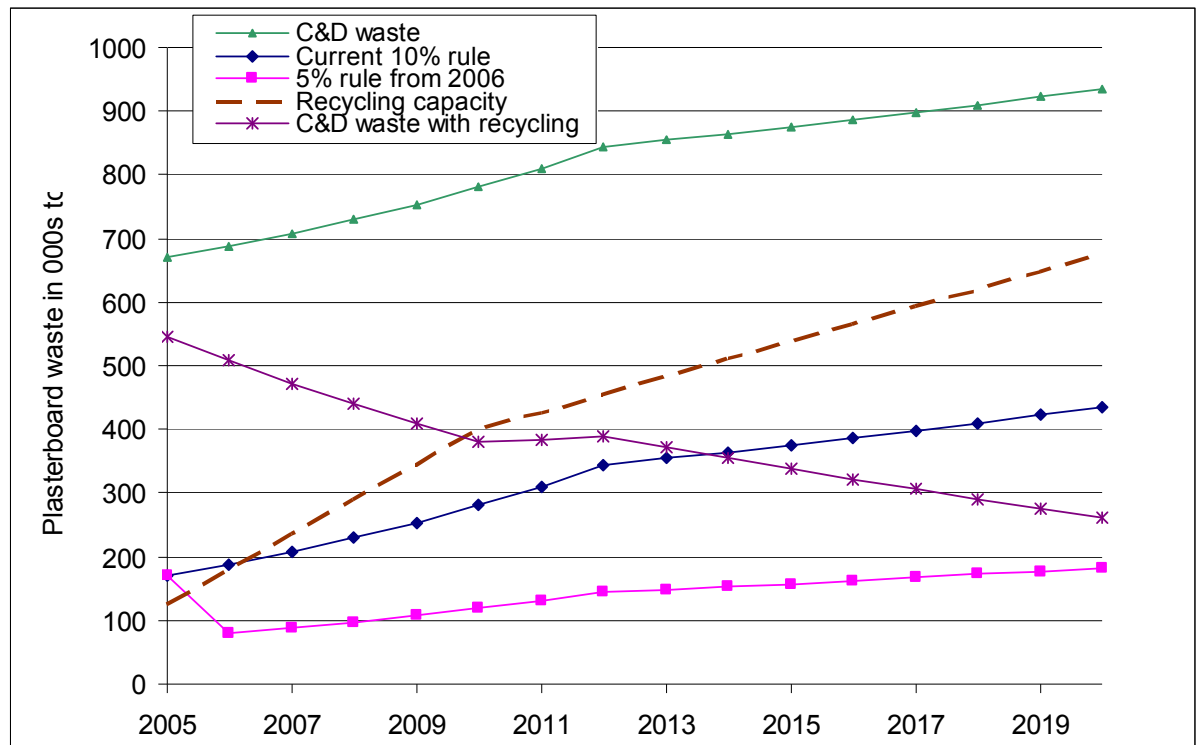
- Construction industry waste is estimated to be from 10% to 20% plasterboard and typical wastage allowances are 10% per job^[26].
- Construction waste to landfill is attributed to this 10% wastage allowance.
- If 12% waste from new build installations is plasterboard and 10% of this is being sent to landfill through the EA 10% allowance, 2% is currently being segregated or disposed of by other means.
- The waste going to landfill as a result of changing the EA rule to 5% assumes 2% is currently segregated and the other 5% can no longer be sent to landfill.
- 0.07 million tonnes of plasterboard were recycled in 2004 but could expand to at least 0.4 million tonnes/year by 2010^[27], a growth rate of 55 kt/year.
- Growth in recycling capacity will be at half this rate (55 kt/year down to 27.5 kt/year) between 2010 and 2020.
- WRAP figures suggest 500-1,000 kt/year of plasterboard waste occurs from demolition activities.
- Indicators suggest that demolition activity is relatively constant and as such the amount of waste plasterboard arising will be fairly static. In Table 9, 500 kt/year has been used to calculate the projected figures for plasterboard waste to landfill up to 2020.

The effects of reducing the 10% plasterboard-in-skip allowance to 5% immediately (in 2006), recycling according to the capacity of the plasterboard industry and keeping the amount of waste material arising at a minimum from the outset have been modelled. Figure 3 shows the influence of these actions on the volume of plasterboard waste going to landfill. The smallest impact would come from leaving the 10% rule unchanged, whilst increasing recycling capacity would make significant reductions to volumes of material going to landfill.

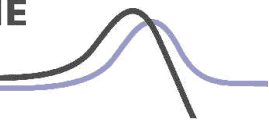
^[26] Oakdene Hollins Ltd.

^[27] WRAP report, January 2006. Review of Plasterboard Material Flows and Barriers to Greater Use of Recycled Plasterboard.

Figure 3 Predicted future volume of plasterboard waste going to landfill



PLASTERBOARD TO LANDFILL								
Year	consumption 000 tonnes	Construction waste 10% of consumed 000 tonnes	Effect of EA rule		Recycling capacity at 55ktpa 000 tonnes	Demolition/refurbishment waste 000 tonnes	Total C&D plasterboard waste 000 tonnes	C&D plasterboard with recycling 000 tonnes
			current 10% rule	5% rule from 2006				
			000 tonnes	000 tonnes				
2004	2090				70			
2005	1697	170	170	170	125	500	670	545
2006	1876	188	188	79	180	500	688	508
2007	2075	208	208	87	235	500	708	473
2008	2295	230	230	96	290	500	730	440
2009	2538	254	254	107	345	500	754	409
2010	2808	281	281	118	400	500	781	381
2011	3105	311	311	130	428	500	811	383
2012	3434	343	343	144	455	500	843	388
2013	3537	354	354	149	483	500	854	371
2014	3643	364	364	153	510	500	864	354
2015	3753	375	375	158	538	500	875	338
2016	3865	387	387	162	565	500	887	322
2017	3981	398	398	167	593	500	898	306
2018	4101	410	410	172	620	500	910	290
2019	4224	422	422	177	648	500	922	275
2020	4350	435	435	183	675	500	935	260



Related MTP information

- BNPB2: Plasterboard - Waste Management
- BNPB3: Plasterboard - Legislation and Policy Drivers

Changes from version 1.1.

Market projection figures have been changed to take into account more up to date sales figures and a higher projected growth rate in plasterboard consumption. Tables 8 and 9 and Figures 2 and 3 have been modified.

Consultation and further information

Stakeholders are encouraged to review this document and provide suggestions that may improve the quality of information provided, email info@mtprog.com quoting the document reference, or call the MTP enquiry line on +44 (0) 845 600 8951.

For further information on related issues visit www.mtprog.com