IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

IN RE: DOMESTIC DRYWALL
ANTITRUST LITIGATION

MDLNo.2437 13-MD-2437

THIS DOCUMENT RELATES TO:

All Actions

STIPULATED ORDER REGARDING THE PRODUCTION OF DOCUMENTS AND ELECTRONICALLY STORED INFORMATION

It is hereby stipulated and agreed, by and between Plaintiffs and Defendants (collectively, "the Parties," and each a "Party"), by their respective counsel in the above-captioned action as follows:

A. **DEFINITIONS**

- "Document" or "documents" is defined to be synonymous in meaning and equal in scope to the usage of this term in Federal Rules of Civil Procedure 26 and 34.
- "E-mail" means electronic messages sent or received asynchronously, including any
 documents incorporated as attachments, via messaging applications, including, but not
 limited to, Microsoft Outlook, Google Gmail or Lotus Notes.
- 3. "ESI" is an abbreviation of "electronically stored information" and shall have the same meaning and scope as it has in the Federal Rules of Civil Procedure.
- 4. "Extracted Text" means the text extracted from a Native Format file and includes at least all header, footer and document body information.
- "Load File" means an electronic file that is used to import all required production information into a document database, including document images, extracted and/or

- OCR text, native files where required, and metadata, as well as information indicating document and page breaks, and document relationships such as those between an email and its attachments and a document and information related to embedded content.
- 6. "Metadata" means structured information about ESI that is created by the file system or application, embedded in the document or email and sometimes modified through ordinary business use. Metadata of the ESI describes, inter alia, the characteristics, origins, usage and validity of the collected ESI.
- "Native Format" means the format of ESI in the application in which such ESI was originally created.
- 8. "OCR" means the optical character recognition technology used to read paper documents or electronic images of documents and output such documents to a searchable text format. The latter text is also referred to as the "OCR text" or simply "OCR."
- 9. "Producing Party" means a party in the above captioned matter that produces documents.
- 10. "Receiving Party" means a party in the above captioned matter to whom documents are produced.
- 11. "Responsive Document" means any document that is responsive to any discovery requests served on the Producing Party in the litigation and which the Producing Party has agreed or been ordered to produce, subject to the limitations set forth in the Federal Rules of Civil Procedure or Order of the Court.
- 12. "Tagged Image File Format" or "TIFF" refers to the CCITT Group IV graphic file format for storing bit-mapped images of ESI or paper documents.

B. SCOPE

- The procedures and protocols set forth in this Stipulated Order shall govern the
 production of Responsive Documents between the Parties in the litigation. Any practice
 or procedure set forth herein may be modified by written agreement of the Parties.
- The Parties do not waive any objections to the production, discoverability, or confidentiality of Documents, including, without limitation, objections regarding the burden, overbreadth or relevance of document requests related to Documents.
- 3. The Parties shall make their best efforts to comply with and resolve any differences concerning compliance with this Stipulated Order. If the Parties are unable to reach agreement, the Parties shall submit any dispute to the Court for resolution.
- Counsel executing this Stipulated Order warrant and represent that they are authorized to do so on behalf of themselves and their respective clients.

C. PRODUCTION FORMAT

- This Stipulated Order shall govern the production format of documents and ESI, as
 described in Federal Rule of Civil Procedure 34, to the extent available. This Stipulated
 Order does not govern any procedures or criteria used to limit the scope of production
 such as identification and preservation of potentially responsive data types and systems,
 custodian selection, or any technology-assisted culling or review processes, such as the
 use of keyword search terms.
- The Parties shall produce paper documents and ESI according to the specifications provided in Exhibit A.
- De-Duplication. A Party is only required to produce a single copy of a responsive document. A Party may remove exact duplicate ESI according to the MD5/SHA-1

hashing method specified in Exhibit A and shall provide the additional information about custodians of de-duplicated documents specified in Exhibit A. However, (i) de-duplication shall be performed only at the document family level so that attachments are not de-duplicated against identical stand-alone versions of such documents and vice versa, although each family member shall be hashed separately for purposes of populating the Fingerprint field in Exhibit A; (ii) attachments to e-mails or other documents shall not be disassociated from the parent e-mail or document even if they are exact duplicates of another document in the production, and (iii) paper documents shall not be eliminated as duplicates of responsive ESI. ESI that is not an exact duplicate according to the method specified in Exhibit A may not be removed. The Parties shall make every effort to reach agreement on any culling criteria to be used, including but not limited to de-NIST criteria, date ranges, and file type inclusion/exclusion.

4. Encryption. The Parties will make reasonable efforts to ensure that all encrypted or password-protected documents are successfully processed for review and production under the requirements of this Stipulated Order, and if produced in native form, the decrypted document is produced. To the extent encrypted or password-protected documents are successfully processed according to the requirements of this Stipulated Order, the Parties have no duty to identify the prior encrypted status of such documents. To the extent such documents are not successfully processed despite use of reasonable efforts, including reasonable efforts to obtain passwords, the Producing Party agrees to produce an inventory of such files that are determined to have a reasonable likelihood of containing relevant information as is apparent without decryption such as attachments to responsive files, or metadata suggestive of responsiveness, such as relevant file names,

and in any case shall include any container files such as PST or ZIP files. The inventory shall contain any required metadata and document identifying information, including family relationships, to the extent that such information can be extracted using reasonable efforts during document processing. The inventory shall be produced in accordance with the Load File specifications provided in Exhibit A. Each Party may request production of such encrypted files, as well as a written description of the efforts undertaken by the Producing Party to decrypt the file, according to the procedure specified for requesting production of ESI in Native Format in Paragraph C.6. below, and such requests will not be unreasonably denied.

5. Documents to Be Produced Natively. Microsoft Excel and other spreadsheet files, Microsoft Access and other personal (non-enterprise) database files, video and audio files, animation files, PowerPoint and other presentation files, and any other ESI that is not accurately represented in TIFF format shall be produced in Native Format. If a document to be produced in Native Format contains privileged information, the document will be produced by producing the document in TIFF format with redactions. To the extent documents that fall under this paragraph contain privileged information and cannot be redacted or produced in TIFF format, such documents will be logged on a privilege log pursuant to Section F. The production load files shall contain a link to the produced Native Files as specified in the "Native Link" metadata field described in Exhibit A. To the extent a response to discovery requires production of discoverable electronic information contained in an enterprise database (as opposed to Microsoft Access and similar personal database files), the Parties shall discuss the production scope and format prior to production. Each electronic file produced in Native Format shall be assigned a

unique Document Number, and the database record for that file shall include a singlepage TIFF image branded with this unique Document Number in the lower right corner
of the image as a Bates number, with the phrase "PRODUCED IN NATIVE FORMAT"
(or similar language) branded in the center of the page. To protect the confidentiality of
files produced in Native Format, any confidentiality designations pursuant to the
Stipulated Protective Order must appear on the associated TIFF placeholder on the lower
left hand corner in no less than 10-pt font. Files produced in Native Format shall be
given file names identical to the Document number, followed by the file extension and
include the confidentiality designation after the file number, e.g., US00000000_
CONF.xls or US00000000_ HIGHCONF. For each file produced in Native Format,
Producing Party shall also indicate its native status in the NativeFile metadata field
described in Exhibit A.

6. Production of Additional Documents in Native Format. Each Party reserves the right to request production of ESI in Native Format for any ESI that is not adequately represented in the TIFF format specified in Exhibit A, and such requests will not be unreasonably denied. Such a request shall be made according to the following protocol.

- a. The requesting Party shall make any such request (a) within sixty (60) days after the close of discovery, or (b) if a production is made after the close of discovery, within sixty (60) days after any such production is made.
- b. The requesting Party shall provide a list of Bates numbers of the documents that it is requesting to be produced in native file format.
- c. Within fourteen (14) days of receiving this request, the producing Party will either (i) produce the requested native files to the extent reasonably practicable or (ii) respond in writing, setting forth its position regarding the production of the requested documents.
- d. If the Parties are unable to agree as to the production of the requested documents in Native Format, the parties may submit the matter to the Court.
- 7. Non-responsive Attachments. The parties agree that fully non-responsive attachments to responsive parent documents need not be produced; however, non-responsive parent documents must be produced if they contain any responsive attachments. Where the parties withhold a fully non-responsive attachment, they will produce a Bates numbered TIFF slip sheet in place of the attachment, along with all metadata for that attachment as specified in Exhibit A, except that the 'ExtractedText' metadata field need not be populated. The TIFF slip sheet for each withheld attachment will state 'Family Member Withheld as Non-Responsive' and, to the extent technologically reasonable, identify each withheld attachment's FileName and ParentBates. If a Producing Party does not believe it is technologically reasonable to identify a withheld attachment's FileName and ParentBates on the TIFF slip sheet, the Producing Party will consult in good faith with the Receiving Party prior to its initial production of ESI containing non-responsive attachments. Moreover, the "Non-Responsive" metadata field specified in Exhibit A shall be marked "Yes" for any attachment that is withheld on the grounds of non-responsiveness. The Receiving Party has the right to request the production of any

- attachment withheld solely on the ground of non-responsiveness, and such request will not be unreasonably denied by the Producing Party. Such requests will be made according to the procedure specified for requesting production of ESI in Native Format in Paragraph C.6. above. The parties agree to meet and confer in good faith to attempt to resolve any dispute arising under this provision.
- 8. Unitization. In scanning paper documents, each page of paper should be output to a single page TIFF file. Distinct, logical document breaks should be defined as such in a standard Opticon load file as described in Exhibit A. In the case of an organized compilation of separate documents for example, a binder containing several separate documents behind numbered tabs the document behind each tab should be scanned separately, but any document or family relationship among the scanned documents in the compilation should be reflected in the data load file at the appropriate standard fields. Pages containing post-it notes or other detachable notes that obscure the underlying document should be scanned once with the detachable note intact, and then again without it, and made part of the same document. The Parties will make their best efforts to unitize the documents correctly.
- 9. Document Numbers and Confidentiality Designations for TIFF Images. Each page of a document produced in TIFF file format shall have a legible, unique fixed-length numeric identifier ("Document Number") containing eight (8) digits electronically "burned" onto the image in no less than 10-pt font. Unless it would obscure, conceal or interfere with any information originally appearing on the document, the Document Number shall be burned on the lower right hand comer of the document. Unless it would obscure, conceal or interfere with any information originally appearing on the document, any

confidentiality designation pursuant to the Stipulated Protective Order filed with the Court will appear on the lower left hand side of each page of a document produced, in no less than 10-pt font. The Document Number for each document shall be created so as to identify the Producing Party and the Document Number (e.g., "US000000000") and may contain an underscore or dash between the prefix and the Document Number. Each party's document numbering scheme shall use the unique identifying name agreed upon by the parties.

- 10. Embedded Files. If a document has information from another file embedded in it, (e.g., a Word document that has a spreadsheet embedded in it), the Producing Party shall produce the document with all embedded information, and the Receiving Party may request that the embedded file be produced as a standalone file. The Producing Party shall promptly respond in writing if it cannot produce the requested embedded file as a standalone file, after which the Parties shall meet and confer.
- 11. Production Media. The Producing Party shall produce document images, native files, load files and metadata on hard drives, CDs, DVDs, secure FTP, or other mutually agreeable media ("Production Media"), provided that the parties shall agree to the most cost-effective and expeditious manner of transfer to the Receiving Party. Each piece of Production Media shall include a unique identifying label corresponding to the identity of the Producing Party, the date of the production of documents on the Production Media and the Document Number ranges of the documents in that production (e.g., "USG Production September 1, 2013, US00000123 US00000456"). To the extent that the Production Media includes any confidential information protected under any Stipulated Protective Order filed with the Court, the label on such Production Media shall indicate

that the Production Media includes information so designated as required under the terms of the Stipulated Protective Order. Production Media shall include text referencing the case name and number. Further, any replacement Production Media shall cross-reference the original Production Media, clearly identify that it is a replacement and cross-reference the Document Number range that is being replaced. All Production Media that is capable of write protection should be write-protected before production. All Production Media may be encrypted, with the Producing Party to provide a decryption key at the time of production.

- 12. Original Documents. Nothing in this Stipulated Order shall eliminate or alter any Party's obligation to retain Native Format copies, including associated metadata, of all ESI preserved for and produced in the litigation and/or original versions of all hard copy documents preserved for and produced in the litigation. Nothing in this section alters a party's obligation to retain data pursuant to the Federal Rules of Civil Procedure or Court Order.
- 13. Metadata Fields and Processing. Each of the metadata and coding fields set forth in Exhibit A that can reasonably be extracted from a document shall be produced for that document. The parties are not obligated to populate manually any of the fields in Exhibit A if such fields cannot be extracted from a document and its context in the source data, with the exception of the following: (a) BegBates, (b) EndBates, (c) BegAttach, (d) EndAttach fields, (e) Custodian, (f) Paper (Y/N), (g) Redacted (Y/N), (h) Confidentiality, (i) NativeFile (Y/N), (j) ProdVolume, (k) ParentBates, and (l) AttachBates.

- 14. This Stipulated Order shall have no effect on any producing Party's right to seek reimbursement for costs associated with collection, review, or production of documents or ESI.
- 15. Nothing in this Stipulated Order shall be interpreted to require disclosure of irrelevant information or relevant information protected by the attorney-client privilege, work-product immunity, or any other applicable privilege or immunity. The Parties do not waive any objections as to the production, discoverability, admissibility, or confidentiality of documents and ESI.

D. PROCESSING SPECIFICATIONS

The Producing Party shall collect and process documents using forensically sound methods that avoid spoliation of data. The Producing Party will generate and preserve the MD5 hash values of all ESI based on the non-spoliated source native file. The Producing Party shall use the following specifications when converting ESI from its Native Format into TIFF image files prior to its production:

- All ESI shall be processed with a single time zone and a date and time setting that is
 consistent across all Defendant productions, and across all Plaintiff productions. The
 time zone used for a production shall be specified as required in Exhibit A.
- All TIFF images shall display tracked changes, comments and other rich data as
 displayed in the document, regardless of the display setting for this information as last
 saved by the custodian, to the extent technically possible.

E. PROTECTIVE ORDER

The terms of the Stipulated Protective Order filed with the Court governing the inadvertent production of privileged information, as well as Fed. R. Civ. P. 26(b)(5)(B), apply to all productions made pursuant to this Stipulated Order.

F. PRIVILEGE LOG

- Pursuant to Fed. R. Civ. P. 26, the Parties agree to exchange Privilege Logs that describe
 the nature of the documents, communications, or tangible things that are not produced or
 disclosed and do so in a manner that—without revealing the information itself that is
 asserted to be privileged or protected—will enable other Parties to assess the claim.
- 2. The Parties agree that all Privilege Logs shall include, but not be limited to, the following information: the Bates number of the document (for redacted documents only); the date of the document; the identity (and title if employed by the Producing Party) of all persons who authored the document and identification of which of them are attorneys; the identity of all persons designated as addressees, copyees or blind copyees (indicating whether a person was an addressee, copyee or blind copyee) and identification of any attorneys; the custodian(s) of the document; the type or nature of the privilege or immunity asserted; and a brief description of the subject matter of the document, sufficient to enable another party's evaluation of the claim of privilege or immunity. Each Producing Party shall produce along with any Privilege Log a list of (a) any attorney named in the Privilege Log including information about whether they are internal or external counsel, and (b) any individuals named in the Privilege Log who were not employed by the Producing Party as of the date of the document.

- 3. Each member of a family of documents (i.e., each member of a set of documents in a parent—child relationship to each other) that is withheld or redacted on the grounds of privilege or immunity shall be identified individually (e.g., e-mail attaching memorandum), but members of the same family (to the extent such members are also being withheld or redacted) may be logged together as a single entry on the Privilege Log.
- 4. Any e-mail chain (i.e., a series of e-mails linked together by e-mail responses and forwarding) that is withheld or redacted on the grounds of privilege or immunity may be logged together as a single entry on the Privilege Log and may be identified by the topmost e-mail in the chain that is withheld or redacted.
- 5. The parties agree that communications between a Party and its outside counsel who has been retained in this litigation dated on or after December 13, 2012 need not be included on any privilege log.

APPROVED AS TO FORM, SUBSTANCE, AND ENTRY

/s Steven E. Bizar

Steven E. Bizar

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IT IS SO ORDERED.

Dated:

2013

Honorable Michael M. Baylson

United States District Judge

EXHIBIT A

1. IMAGES:

- Produce documents in Single Page Group IV TIFF black and white files
- Image Resolution of at least 300 DPI
- Black and White. However, paper documents or ESI items that a producing party has converted to color for its review must be produced in color. For all other paper documents or ESI items containing color, a producing party need not initially produce such items in color. However, if an original document or ESI item contains color text, markings or graphics, and it is necessary to see those items in their original color to understand the full meaning or content of the document, then the receiving party may, in good faith, request that the document or ESI item be produced in color format. The producing party will not unreasonably deny such a request. The production of such documents and/or ESI in color shall be made in single-page JPEG format, provided JPEG format offers sufficient quality for the review of these documents and/or ESI. If either party deems the quality of the document produced in JPEG format to be insufficient, the producing party must produce the color image in TIFF or PDF format.
- File Naming Convention: Match Bates Number of the page.
- Insert placeholder image for files produced in Native Format (see Paragraph C.5.)
- Original document orientation shall be retained

2. SPECIAL FILE TYPE INSTRUCTIONS:

- Produce database, spreadsheet, presentation, audio/video, and certain other file types in Native Format, as specified in Paragraph C.5.
- If redactions are required, see production requirements specified in Paragraph C.5.

3. FULL TEXT EXTRACTION/OCR:

- Produce full extracted text for all file types (Redacted text will not be produced) including text of embedded content
- Produce OCR text for any paper document
- Produce OCR text for any ESI where the source format was an image file (such as JPG, JPEG, GIF, BMP, PCX, PNG, TIF, TIFF etc.) where extracted text cannot be provided, using industry standard OCR technology (Redacted text will not be produced)
- Production format: Single text file for each document, not one text file per page
- File Naming Convention: Match Beg Bates Number

4. ESI (AND PAPER TO THE EXTENT APPLICABLE) PRODUCTION METADATA FIELDS:

- BegBates: Beginning Bates Number
- EndBates: Ending Bates Number
- **BegAttach**: Beginning Bates number of the first document in a document family range. Documents that are part of document families, i.e. containing parents or attachments should receive a value.

- EndAttach: Ending Bates number of the last document in attachment range a document family range. Documents that are part of document families, i.e. containing parents or attachments, should receive a value.
- PgCount: Page Count
- Custodian: Name of the Custodian of the Document Produced Last Name, First Name format
- CustodianAll: Names of all Custodians, including any blind copy (BCC) recipients, of any documents that were not produced because they are MD5 or SHA-1 duplicates of the produced version of the given document
- FileName: Filename of the original source ESI as stored by the custodian
- FilePath: Full path of the original source ESI as stored by the custodian
- NativeLink: Path and filename to produced Native file (see Paragraph C.5.)
- NativeFile: "Yes," for documents produced in native format; otherwise, blank
- EmailSubject: Subject line extracted from an email message
- Title: Title field extracted from the metadata of a non-email document
- Author: Author field extracted from the metadata of a non-email document
- From: From field extracted from an email message
- To: To or Recipient field extracted from an email message
- Cc: CC or Carbon Copy field extracted from an email message
- BCC: BCC or Blind Carbon Copy field extracted from an email message
- DateRcvd: Received date of an email message (mm/dd/yyyy format)
- TimeRcvd: Received time of an email message
- DateSent: Sent date of an email message (mm/dd/yyyy format)
- TimeSent: Sent time of an email message
- DateCreated: Date that a file was created (mm/dd/yyyy format)
- DateLastModified: Last modification date
- **TimeZone**: Time zone used for displaying dates and times on the associated TIFF image
- Fingerprint: MD5 or SHA-1 hash value of the file generated at the document family
- FileType: File type description of the file (Excel, Word, PowerPoint, etc.)
- Paper: Designating that a document originated in paper form. "Yes" for documents originating in paper form, otherwise left blank
- ProdVolume: Identifies production media deliverable
- Extracted Text: File path to Extracted Text/OCR File
- Redacted: "Yes," for redacted documents; otherwise, blank
- **Non-Responsive:** "Yes" for any attachment that is withheld as non-responsive pursuant to Paragraph C.7.
- Confidentiality: "Confidential" or "Highly Confidential," if a document has been so designated under the Protective Order; otherwise, blank
- AttachCount: Number of attached files
- AttachName: The file name(s) of the attached items delimited with a semicolon
- Importance Ranking: Level of importance/sensitivity of messages or calendar items

- ParentBates: First Bates number for the parent item of a family --**Will not be populated for items that are not part of a family. Should be populated in each record representing an attachment "child" item
- AttachBates: First Bates number of each "child" attachment. --**Can be more than one Bates number listed depending on the number of attachments. Should be populated in each record representing a "parent" document

6. **DE-DUPLICATION:**

- De-duplication method: Parties must de-duplicate stand-alone documents or entire document families globally using MD5 or SHA-1 Hash value matching
- Common system files defined by the NIST library (http://www.nsrl.nist.gov/) need not be produced

7. IMAGE LOAD FILES

- The name of the image load file should mirror the name of the delivery volume, and should have an .OPT extension (i.e., ABC001.OPT)
- The volume names should be consecutive (i.e., ABC001, ABC002, et. seq.)
- There should be one row in the load file per TIFF image.
- Every image in the delivery volume should be contained in the image load file.
- The image key should be named the same as Bates number of the page.
- Load files should not span across media (e.g., CDs, DVDs, Hard Drives, Etc.), i.e., a separate volume should be created for each piece of media delivered.
- The Opticon OPT image load file (.OPT) configuration shall be a page level commadelimited file containing seven fields per line:
 PageID, VolumeLabel, ImageFilePath, DocumentBreak, FolderBreak, BoxBreak, PageCount
- PageID PageID of the item being loaded. This field must be identical to the image name (less the file extension).
- VolumeLabel This field should match the Volume Name assigned in the corresponding metadata load file.
- o ImageFilePath The path to the image from the root of the delivery media.
- DocumentBreak The letter "Y" denotes the first page of a document. If this field is blank, the page is not the first page of a document.
- FolderBreak Leave empty.
- o BoxBreak Leave empty.
- o PageCount Optional.
 - Example Option Delimited File:

```
MSC000001,MSC001,D:\IMAGES\001\MSC000001.TIF,Y,,,3
MSC000002,MSC001,D:\IMAGES\001\MSC000002.TIF,Y,,,,
MSC000003,MSC001,D:\IMAGES\001\MSC000003.TIF,Y,,,,
MSC000004,MSC001,D:\IMAGES\001\MSC000004.TIF,Y,,,2
MSC000005,MSC001,D:\IMAGES\001\MSC000005.TIF,Y,,,,
```

• Concordance Delimited Files:

bBegDocbbEndDocbbBegAttachbbEndAttachbbCustodianb

- o The data load file should use standard Concordance delimiters:
- Comma − ¶ (ASCII 20)

- o Quote − þ (ASCII 254)
- o Newline ® (ASCII174)
 - The first record should contain the field names in the order of the data;
 - All date fields should be produced in mm/dd/yyyy format;
 - Use carriage-return line-feed to indicate the start of the next record;
 - Load files should not span across media (e.g., CDs, DVDs, Hard Drives, Etc.); a separate volume should be created for each piece of media delivered;
 - The name of the data load file should mirror the name of the delivery volume, and should have a .DAT extension (i.e., ABC001.DAT);
 - The volume names should be consecutive (i.e., ABC001, ABC002, et. seq.)