# **LOWE'S COMPANIES, INC.**

## **ELECTRONIC DATA INTERCHANGE PARTNER IMPLEMENTATION PACKAGE**

ANSI X12.104

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## 1. SOURCES OF INFORMATION ABOUT EDI

#### STANDARDS DOCUMENTATION

If you are new to EDI, you may write and obtain literature on the subject. Below is a list of authoritative sources for this literature. As a minimum, we recommend that you obtain a copy of the current <u>ANSI X12 Standards</u> and the <u>EDI Yellow Pages</u>. The former gives you precise specifications for EDI document structure and contents, while the latter will put you in touch with the EDI world. We also recommend that you get involved in your own particular industry association. Many industry associations hold meetings involving UPC, EDI and Quick Response. Examples are the American Hardware Manufacturers Association and the American Forest & Paper Association.

Nationally, there is one EDI standards-making body, American National Standards Institute (ANSI) Internationally, EDI standards are the responsibility of Working Party 4 of the Economic Commission of Europe, a commission of the United Nations. Working Party 4's document standards are known as EDIFACT (EDI for Administration, Commerce, and Trade).

American National Standards Institute1430 BroadwayNew York, NY10018(301)670-0811

ANSI publishes U.S. standards for several business documents:

Supporting Standards Framework

X12.3 Data Element Dictionary
X12.5 Interchange Control Structure
X12.6 Application Control Structure
X12.20 Functional Acknowledgment 997
X12.22 Data Segment Directory

Specific Transaction Sets

X12.1 Purchase Order (850)
X12.2 Invoice (810)
X12.4 Payment Order/Advice (820)
X12.9 PO Acknowledgment (855)
X12.10 Shipping Notice (856)
X12.14 Planning Schedule (830)
X12.52 Product Activity Data (852)

These and many other transaction sets are developed by the Accredited Standards Committee X12 (ASC X12), which develops all U.S. EDI standards for approval by ANSI. ASC X12 publishes new standards annually, and they are quickly implemented. You may obtain all published versions of the ASC X12 documents from the following two organizations:

Data Interchange Standards Association (Secretariat of Accredited Standards Committee X12) Suite 355				
1800 Diagonal Road				
Alexandria, Virginia 22314-2852	(703) 548-7005			
EDI Support Services				
P. O. Box 203	(216) 974-7650			
Chardon, OH 44024-0203	(800) 334-4912			

The following organization interprets the ANSI X12 standards for the retail industry. Semi-annually they publish a retail-oriented subset of the ANSI X12 documents.

VICS (Voluntary Interindustry Communication Standards) c/o Uniform Code Council, Inc. 8163 Old Yankee Road, Suite J Dayton, Ohio 45458

#### EDI YELLOW PAGES

This is a telephone-style book that lists a contact name and phone number for all companies doing business via EDI, plus standards organizations, publishers, consultants, software and hardware partners, and network service providers. It is published semi-annually.

EDI Yellow Pages c/o EDI, Spread the Word 3331 Towerwood Dr. Suite 106 Dallas, TX 75234 (214) 243-3456

#### EDI PUBLICATIONS

The following publications provide helpful information about implementing EDI, current events, and product comparisons:

EDI World 2021 Coolidge St. Hollywood, FL 33020-2012	(800) 336-4887
EDI News Business Information, Inc. 1201 Seven Locks Road Potomac, MD 20854	(301) 340-2100

#### LOWE'S EDI COORDINATORS

If you have questions about EDI or want to discuss the details of implementing EDI with Lowe's, please call one of our EDI coordinators. Each is very knowledgeable about EDI and the information presented in this package.

We have coordinators for each application area, Merchandising and Payables. These individuals are listed below with their phone numbers and areas of responsibility.

Debbie Queen, EDI Coordinator - A - D Partners - 214, 850, 852, 855, 856 documents	Phone: (336) 658-2245 FAX: (336) 658-2016
Kamela Hemric, EDI Coordinator - E - L Partners - 214, 850, 852, 855, 856 documents	Phone: (336) 658-4084 Fax: (336) 658-2016
Jean Wellborn, EDI Coordinator - M - So Partners - 214, 850, 852, 855, 856 documents	Phone: (336) 658 3497 Fax: (336) 658-2016
Scott Shepherd, EDI Coordinator - Sp – Z Partners – 214, 850, 852, 855, 856 documents	Phone : (336) 658-4266 FAX: (336) 658-2016
	Fax: (336) 658-7105
Delores Rhoades, Financial EDI Coordinator - A - L Partners - 210, 810, 820 documents	Phone: (336) 658-4377 Fax: (336) 658-3699
Jennifer Richardson, Financial EDI Coordinator - M - Z Partners - 210, 810, 820 documents	Phone: (336) 658-2196 Fax: (336) 658-3699
Bridgett Gardner, Financial EDI Backup - A-Z Partners 210, 810, 820 documents	Phone: (336) 658-2236 Fax: (336) 658-3699

Mailing address:

Lowe's Companies, Inc. P. O. Box 1111 North Wilkesboro, NC 28656-0001

## 2. DATA COMMUNICATIONS

Lowe's has chosen to conduct EDI data communications through third-party networks (Value Added Networks or VANs). With only a limited investment in data communications equipment and personnel, this approach enables Lowe's and our partners to exchange EDI data with an unlimited number of trading partners. Also, VAN-based data communications eliminate scheduling problems, provide standard logical and physical datacomm interfaces, and enable faster data interchange through parallel operation.

When communicating through VANs, there are a few basic practices that should be observed.

#### MAILBOX ACTIVITY

The first concerns the timing of data transmissions and document retrieval. Obviously, the timeliness of our transmissions are rendered useless if our partners choose not to dial in to their EDI mailboxes regularly. As a minimum, Lowe's requires all its EDI partners to access their EDI mailboxes **DAILY**. A schedule of pick up times may be discussed at the time a trading partnership is established.

Most VANs produce control reports that summarize the data exchanged with their customers. For example, Sterling Software's Network Services Division provides a '70' report that lists the following information for each customer's mailbox activity:

- interchange control number
- group control number
- date and time the interchange was mailboxed
- the date and time the interchange was retrieved
- how many documents were in the interchange
- the name of the sender or receiver of the document

By providing the date and time that a trading partner retrieved the interchange, you can be assured that your documents have been picked up. The reports will also show if you were successful in retrieving all the interchanges in your mailbox. For example, you might have modem problems and not realize it until you analyze the '70' report and discover that there are more interchanges in your mailbox than you retrieved. We strongly recommend that all of our trading partners receive these control reports from their VAN, and learn how to utilize the information that they provide.

#### FUNCTIONAL ACKNOWLEDGMENTS

Secondly, we require all partners to return functional acknowledgments (997) for our documents <u>upon receipt</u> of those documents. These functional acknowledgments should be sent at the <u>functional group</u> level, with only AK1 and AK9 segments. If acknowledgment failed for a particular transmission and cannot be regenerated, we then require a fax stating the interchange number and date and a contact name and phone number in case of questions. Send the fax to the appropriate EDI Coordinator.

Lowe's will retrieve mail from our mailbox after each outbound transmission has been completed. This inbound data consists of invoices, acknowledgment for purchase orders, etc.. If invoices are received and processed by 7:00pm, a functional acknowledgment will be transmitted that same night. However, if the invoice is processed after 7:00pm, a functional acknowledgment will be transmitted the next evening (Monday through Friday).

#### <u>NETWORKS</u>

Lowe's has chosen Sterling COMMERCE (formerly ORDERNET) as our primary VAN. You may contact them through the contact listed below:

Sterling Commerce	Ann Bowman		(614) 793-7197
Commerce Services Group			
4600 Lakehurst Court			
PO Box 8000			
Dublin, OH 43016-2000		FAX:	(614) 793-5170

Sterling's network will be the fastest and safest way to move data between our two companies. When a partner uses a different VAN, an interconnect is then required. For example, we transmit documents to Sterling and they transfer those same documents to your VAN. You then dial your VAN to retrieve the documents. Therefore, it takes longer to exchange EDI data between our two companies, and the data's audit trail becomes obscure.

## 3. TRANSLATION SOFTWARE

### PC SOFTWARE

PC EDI software is a rapidly growing area, and there are dozens of products available. An excellent source of information about packages that are available, as well as contacts for those suppliers, is a publication called the *EDI SOFTWARE DIRECTORY* published by <u>EDI WORLD</u>. This valuable publication can be obtained for a few dollars by calling 800-336-4887.

The selling price of most PC-based translators includes implementation of at least one EDI application. In addition, some software suppliers have provided templates in their packages that are promoted as compatible with Lowe's EDI requirements. Please call these firms, ask for their literature, and decide for yourself which product best suits your organization's needs.

Some suppliers of PC EDI software are listed below for your convenience:

Software Provider	Phone Number
DNS Worldwide	800-624-6354 (ext. 4414)
Piedmont Systems	910-766-5255
St. Paul Software	612-641-0963
Sterling Software	614-793-7197
Supply Tech	313-998-4056
TSI International	800-334-2120

#### FEATURE RECOMMENDATIONS

Lowe's recommends that **any** software package have the following features:

1. <u>Be able to monitor control numbers.</u> Each transmission that you receive from Lowe's has unique control numbers in the ISA header, the GS segment and the ST segment. These control numbers increment by one for each consecutive transmission, group, transaction set or functional acknowledgment. Your system should be able to verify that an interchange, group, or transaction set has not been missed or duplicated. It is imperative that these controls be monitored **daily** to insure the integrity of the EDI program. Ask your software provider how your system monitors these control numbers.

2. <u>Be able to automatically return a functional acknowledgment upon receipt of an interchange</u>. This will probably involve dialing the network a second time to send the acknowledgment back. This also helps to insure the integrity of EDI.

3. <u>Reflect the correct document date.</u> There are many software packages that label the document date as the date the order was **retrieved** instead of the date that it was **created**. If you neglect accessing EDI daily, then it appears that Lowe's doesn't provide enough lead time to fill orders. Although this feature of the software is not as critical as the first two, you should at least understand how your software arrives at the purchase order date.

4. <u>Kick out errors intact.</u> If we send you information in an EDI document that your system cannot translate, the software should "kick out" the information "intact." Some packages garble the information so badly that you have no idea what the problem was or which partner sent it.

#### CHECKS AND BALANCES IN EDI

In summarizing, there are three main checks and balances in EDI:

- Each transmission has unique control numbers that should be monitored.
- Each transmission should be acknowledged.
- All mailbox activity should be monitored using VAN reports.

Following the steps above should eliminate a "lost" transmission.

#### EDI TRANSACTION SETS 4.

Lowe's currently supports the following EDI transaction sets:210Motor Carrier Freight Details and Invoice214Transportation Carrier Shipment Status Message

- Shipment Status Details (Ocean) 315
- Invoice 810
- 820 Payment Order/Remittance Advice
- Purchase Order 850
- Product Activity Data (POS) 852
- Purchase Order Acknowledgment Advance Ship Notice (ASN) 855
- 856
- Functional Acknowledgment 997