

Address Verification and Security Code Guide

AVS Guide

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1 Introduction

1.1 Address and Security Codes

The address verification system and security code provides the merchant with a further level of security to a transaction.

The address verification and security code feature allows you to carry out checks regarding the validity of the address and security code information supplied by the cardholder.

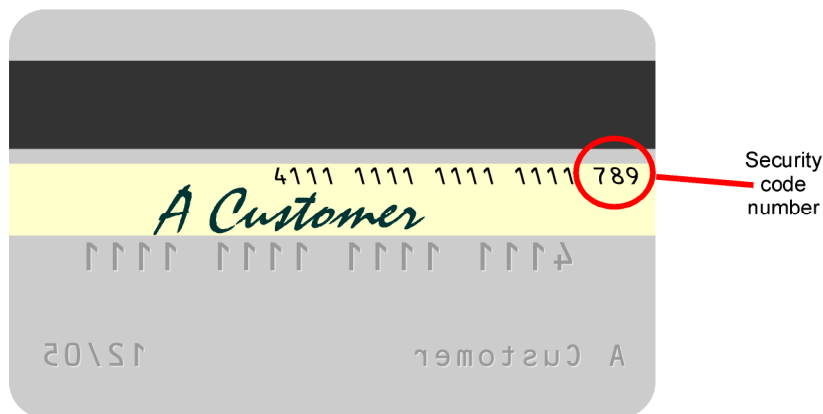
The availability of the address verification and security code facility is dependant on the acquiring bank and card issuer. Please contact SecureTrading for further information on the supported acquirers and card types (e.g. Visa, MasterCard etc.).

1.2 What is address verification?

A customer's address is checked against the address that the card issuer holds for that card. The acquiring bank will indicate whether there is a match between the entered address and the card address.

1.3 What are security codes?

The security code is a three or four digit number printed on your credit or debit card. It is not stored by SecureTrading, and also **must never** be kept by merchants.



The number is often printed on the back of the card, at the top right of the signature strip (see above), but there are some variations. On American Express cards, for example, the security code has four digits, and is printed above the right-hand side of the embossed card number on the front of the card.

1.4 How they work with SecureTrading

When trying to authorise a transaction, SecureTrading will pass, if provided, the customer's address and security code information to the acquiring bank along with the usual payment details. The acquiring bank will return two items of information within its response:

The result of the standard authorisation check, which can be one of:

- Transaction authorised
- Transaction not authorised

The result of the security check, which can be one of:

- Address and security code were both valid
- Address is valid, but the security code was invalid or not checked
- Security code valid, but the address was invalid or not checked
- Address and security code were both invalid
- Address and security code were both not checked.

A data not checked response may be that the card issuer does not support address or security code checking for this card or the information was not provided.

Some acquirers will use the results of the AVS/Security Code checks to decline the transaction. Others will authorise the transaction and leave the decision on whether to proceed up to the merchant. For new accounts, SecureTrading automatically suspends transactions where the security code check has failed. If you wish to change this please contact support to discuss a change to your Security Policy.

The SecureTrading system will respond as normal depending on the result of the standard authorisation check (that is, it accepts or rejects the transaction, and it sends the appropriate web pages and emails to you and your customer).

The results of the security check show up in **MyST**, so you can use it to suspend (or un-suspend) transactions manually.

1.5 Payment fields used

Below is a list of the fields that are used to send the address and security code information to SecureTrading.

1.5.1 SecureTrading Payment Pages

When sending information to SecureTrading via process.cgi, the following field names need to be completed in order to process an address / security code check.

- "securitycode"
- "address"
- "town"
- "county"
- "country"
- "postcode"

1.5.2 SecureTrading Xpay

When sending an XPay request to SecureTrading, the following XML tags need to be completed in order to process the AVS / Security code checks.

In the <CreditCard> element:
<SecurityCode>

In the <Postal> element:

- <Company>
- <Street>
- <City>
- <StateProv>
- <PostalCode>
- <CountryCode>

2 Using Address Verification and Security Code

If you are a new Securetrading customer the address verification and security code will have been enabled when your account was set up. If you are an existing merchant with SecureTrading or you want to change the parameters of the address and security code check, you must contact SecureTrading customer support.

N.B You **must never** store the security code. Care should be taken that no log files or databases contain the security code information. The use of a HTTP GET request to send a payment request to SecureTrading should be avoided.

The address and security code check feature can be configured to suspend a transaction based on the response of the Security Code only (as below).

The default setup for a new merchant account is for the suspension of transactions based on a failed Security Code check. Transactions won't be automatically suspended based on the address check response.

The address and security code settings can be altered so different actions may be performed on a transactions checked using the security code and address check.

To alter the parameters for the Security Code transaction suspension, please contact SecureTrading support, quoting your site reference. You will be asked to decide on the suspension policy required.

Currently the Security code suspension policy can be configured to suspend transactions based on one or more of the following criteria:

- No automatic suspension
- Suspension on incorrect security code (default for new SecureTrading merchant account)
- Suspension on missing security code in request
- Suspension if security code was not checked by issuer

3 The security message

SecureTrading will put one of the following messages in the single transaction view for merchants who have address and security code checking enabled. The response depends on the acquiring bank.

NatWest Streamline

Response Message

DATA MATCHED

Meaning

The information sent to the acquiring bank was valid and the transaction has passed their security checks

SEC CODE MATCH

The security code information sent to the acquiring bank was valid but the address information submitted was invalid, missing or not checked.

ADDRESS MATCH ONLY

The address information sent to the acquiring bank passed the validation but the security code was invalid, missing or not checked.

DATA NOT MATCHED

Both the security code and the address information sent to the acquiring bank were invalid.

DATA NOT CHECKED

The data submitted to the acquiring bank was not checked. Either the details were not passed or the acquiring bank couldn't perform the check based on the card details.

Barclays Merchant Services / HSBC / Lloyds TSB Cardnet

Response Message

ALL MATCH

Meaning

The information sent to the acquiring bank was valid and the transaction has passed their security checks

SECURITY CODE MATCH ONLY

The security code information sent to the acquiring bank was valid but the address information submitted was invalid, missing or not checked.

ADDRESS MATCH ONLY

The address information sent to the acquiring bank passed the validation but the security code was invalid, missing or not checked.

NO DATA MATCHES

Both the security code and the address information sent to the acquiring bank were invalid.

DATA NOT CHECKED

The data submitted to the acquiring bank was not checked. Either the details were invalid or the acquiring bank couldn't perform the check based on the card details.

Securetrading is not able to give more specific information on the acquirer responses.

It is also possible to retrieve the security message using **callback**, **secure callback** and in the merchant e-mail for successful transactions by using the field *\$securitymessage*.

It is important to note that the value of this field **must not** be shown to the customer at all.

4 Testing

Be careful: testing can only be done while your SecureTrading account is in test mode. All new SecureTrading accounts are in test mode by default, and remain so until you request to switch to live mode. For more information on going live, please refer to the Going live document (check the [Further information](#) section of this document).

To test for correct operation put together a dummy order, enter the appropriate details on `orderpage.html`, and progress to `form.html`.

Click *submit* and wait for the result.

You can test using the following dummy credit card details. You should get the responses shown in the table:

Card Details

Credit card number	4111111111111111
Expiry	05/12
Address	789 High Street, Bangor, Gwynedd
Postcode	LL45 6DF
Security Code	123

Response Details

Auth Code	AUTH CODE : TEST
Security Message	ALL MATCH

Card Details

Credit card number	4111111111111111
Expiry	05/12
Address	789 High Street, Bangor, Gwynedd
Postcode	LL45 6DF
Security Code	666

Response Details

Auth Code	AUTH CODE : TEST
Security Message	ADDRESS MATCH ONLY

Note that a transaction may be authorised by the bank, even though the address and security code checks fail. It is **your** responsibility to check this information and suspend the transaction if appropriate.

5 Troubleshooting

1. I am not receiving a Security Message, or am getting DATA NOT CHECKED.

You need to have asked SecureTrading to enable security checking for your account. Please contact SecureTrading support.

2. I am getting a NO MATCH response, however my transaction is still authorised.

The security check is independent of card authorisation. It is your responsibility to check the security message, and to decide whether to accept the transaction.

3. I am getting DATA NOT CHECKED for repeat and subscription transactions.

SecureTrading is not allowed to store the security code, and thus this cannot be included with repeat transactions. You **must never** store the security code on your system.

6 Further Information

This section contains contact information relevant to SecureTrading Payment Pages

6.1 Support

SecureTrading provides support for its software and the operation of its payment service. If you require technical support, first ensure that you have read and understood all relevant documentation.

If the problem persists, please email support@securetrading.com, quoting your SecureTrading site reference and concisely stating the nature of your problem.

Note: Before sending any information to SecureTrading, care should be taken to remove any sensitive information, such as the credit card number.

SecureTrading additional contact details:

Phone: 01248 672 050

Fax: 01248 672 099

6.2 Further reading

For further information please refer to the following documents:

In the general setup guides (<http://www.securetrading.com/general-setup-guides.html>) section of the SecureTrading website:

- Going live document