In Microsoft Dynamics 365 Business Central (BC), tables have a variety of properties that define their behavior, structure, and interaction with other objects in the system. Here's a comprehensive list of the properties that can be applied to tables in BC:

Table Properties:

1. **ID**:
   - **Description:** Unique identifier of the table.
   - **Example:** `ID = 50000;`

2. **Name**:
   - **Description:** Name of the table.
   - **Example:** `Name = "My Custom Table";`

3. **DataClassification**:
   - **Description:** Specifies how data in the table is classified (e.g., ToBeClassified, SystemMetadata).
   - **Example:** `DataClassification = ToBeClassified;`

4. **DataPerCompany**:
   - **Description:** Determines whether the table is company-specific or shared across companies.
   - **Values:** `true` (default, data is company-specific), `false` (data is shared across companies).
   - **Example:** `DataPerCompany = true;`

5. **DataCaptionFields**:
   - **Description:** Specifies the fields used to caption records in the table.
   - **Example:** `DataCaptionFields = "Customer No.", "Customer Name";`

6. **DrillDownPageID**:
   - **Description:** Defines the ID of the page that opens when drilling down on records in this table.
   - **Example:** `DrillDownPageID = "Customer List";`

7. **LookupPageID**:
   - **Description:** Specifies the page ID used for lookups from this table.
   - **Example:** `LookupPageID = "Customer List";`

8. **Permissions**:
   - **Description:** Specifies the permissions granted to this table.
   - **Example:** `Permissions = table 18 = R;` (Read permissions on table 18)

9. **TableType**:

- **Description:** Defines the type of the table (Standard, External, Temporary, etc.).
  - **Values:** `Standard`, `Temporary`, `ExternalSQL`, `ExternalCDS`.
  - **Example:** `TableType = Standard;`

10. **ObsoleteState**:
    - **Description:** Marks the table as obsolete or not.
    - **Values:** `No`, `Pending`, `Removed`.
    - **Example:** `ObsoleteState = Pending;`

11. **ObsoleteReason**:
    - **Description:** Provides the reason why the table is marked as obsolete.
    - **Example:** `ObsoleteReason = 'This table has been replaced by Table 50001';`

12. **ReplicateData**:
    - **Description:** Indicates whether the table data is replicated in Business Central online.
    - **Example:** `ReplicateData = true;`

13. **DataAudit**:
    - **Description:** Specifies whether changes to records in the table should be audited.
    - **Example:** `DataAudit = true;`

14. **CacheSize**:
    - **Description:** Specifies the size of the cache for records in this table.
    - **Example:** `CacheSize = 1000;`

15. **DeleteAllowed**:
    - **Description:** Determines if records in the table can be deleted.
    - **Values:** `true` (default), `false`.
    - **Example:** `DeleteAllowed = false;`

16. **InsertAllowed**:
    - **Description:** Specifies if inserting records into the table is allowed.
    - **Values:** `true` (default), `false`.
    - **Example:** `InsertAllowed = false;`

17. **ModifyAllowed**:
    - **Description:** Specifies if modifying records in the table is allowed.
    - **Values:** `true` (default), `false`.
    - **Example:** `ModifyAllowed = false;`

18. **ReadState**:
    - **Description:** Indicates whether the table can be read from.
    - **Values:** `true` (default), `false`.
    - **Example:** `ReadState = true;`

19. **SourceTableTemporary**:
    - **Description:** Indicates if the table is a temporary table when used in certain contexts.
    - **Example:** `SourceTableTemporary = true;`

20. **ExternalName**:
    - **Description:** Used in integration scenarios to specify the external name of the table.
    - **Example:** `ExternalName = 'ExternalTableName';`

21. **Extensible**:
    - **Description:** Specifies whether the table can be extended by adding new fields and keys.
    - **Values:** `true` (default), `false`.
    - **Example:** `Extensible = true;`

22. **DuplicateKeys**:
    - **Description:** Allows defining whether duplicate keys are permitted.
    - **Example:** `DuplicateKeys = false;`

23. **AutoIncrement**:
    - **Description:** Automatically increments the primary key (typically used for surrogate keys).
    - **Example:** `AutoIncrement = true;`

24. **ModifyTriggers**:
    - **Description:** Specifies whether to run triggers when records in the table are modified.
    - **Example:** `ModifyTriggers = true;`

25. **InsertTriggers**:
    - **Description:** Specifies whether to run triggers when records in the table are inserted.
    - **Example:** `InsertTriggers = true;`

26. **DeleteTriggers**:
    - **Description:** Specifies whether to run triggers when records in the table are deleted.
    - **Example:** `DeleteTriggers = true;`

27. **SQLIndex**:
    - **Description:** Specifies custom SQL indexing options.
    - **Example:** `SQLIndex = NonClustered;`

28. **SQLReplication**:
    - **Description:** Defines whether the table is included in SQL replication.
    - **Example:** `SQLReplication = true;`

29. **SyncOnly**:
    - **Description:** Indicates whether the table is only used for synchronization purposes.

- **Example:** `SyncOnly = true;`

Example Table Declaration:

```al
table 50000 "My Custom Table"
{
    DataClassification = ToBeClassified;
    DataPerCompany = true;
    Permissions = table 18 = R;

    fields
    {
        field(1; "Customer No."; Code[20])
        {
            DataClassification = ToBeClassified;
            TableRelation = "Customer";
        }
        // Additional fields
    }

    keys
    {
        key(PK; "Customer No.")
        {
            Clustered = true;
        }
    }

    DataCaptionFields = "Customer No.", "Customer Name";
    DrillDownPageID = "Customer List";
    LookupPageID = "Customer List";
}
```

Notes:
- Not all properties are required in every table, and some properties are optional depending on the specific use case.
- Some properties (like `TableRelation`, `FieldClass`, `CalcFormula`) are defined within fields rather than at the table level.

These properties provide you with the flexibility to customize the behavior and characteristics of tables in Business Central, depending on your specific requirements.